December 2016

Teacher strategies to improve education outcomes for Indigenous students

Theresa Papp

University of Saskatchewan, the.papp@sasktel.net

Recommended Citation

Papp, Theresa (2016) "Teacher strategies to improve education outcomes for Indigenous students," *Comparative and International Education / Éducation Comparée et Internationale*: Vol. 45: Iss. 3, Article 7.

Teacher strategies to improve education outcomes for Indigenous students

Les stratégies des enseignants pour améliorer les résultats scolaires des élèves autochtones

Theresa Papp, University of Saskatchewan

Abstract

This article presents the teaching strategies that supported education success for Indigenous students of New Zealand based on a case study research approach. Interviews conducted with teacher participants revealed five dominant strategies that were perceived as key elements for improving Māori education outcomes. These strategies were: Building and repairing relationships through a relationship-based pedagogy; student-focused school and classrooms; teachers providing feedforward and feedback to students; administrative leadership; and the regular incorporation of Māori culture in the school and the classroom. Over a six-year timeframe, implementation of these strategies raised more than twofold the Māori academic achievement levels.

Résumé

Basé sur une approche de recherche d'étude de cas, cet article présente les stratégies d'enseignement qui ont soutenu le succès éducatif pour les élèves autochtones de la Nouvelle-Zélande. Les entretiens qui ont eu lieu avec les enseignants participants ont révélé cinq stratégies dominantes qui étaient perçues comme étant des éléments-clés pour améliorer les résultats de l'éducation Maorie. Ces stratégies incluaient: Construire et restaurer les relations par le biais d'une pédagogie axée sur les relations; école et salles de classe centrées sur l'élève; enseignants fournissant des informations anticipatrices et rétroactives aux élèves; leadership administratif; et l'incorporation régulière de la culture Maorie au sein de l'école et dans la salle de classe. Sur une période de six ans, l'implémentation de ces stratégies a plus que doublé les niveaux de réussite académique des Maoris.

Keywords: education, Indigenous, academic improvement, relationship pedagogy
Mots-clés : éducation, autochtone, amélioration académique, pédagogie des relations

Introduction

Indigenous peoples of countries such as Canada, the United States, Australia, and New Zealand share the experience of European colonization and subsequent marginalization. Across these countries, Indigenous peoples consistently demonstrate lower education attainment levels compared to the non-Indigenous population. In both Canada and New Zealand these lower education attainment levels have persisted for many decades (Statistics Canada, 2007; 2014; Statistics New Zealand, 2013b). Canadian statistical reports reveal the need to promote high-quality education programs and improve education completion levels for Aboriginal peoples (Government of Canada, 2015; Government of Saskatchewan, 2014; Haldane, Lafond, & Krause, 2012; Royal Commission on Aboriginal Peoples, 1996; Sharpe & Arsenault, 2009). This has alerted political leaders, school administrators, and teachers of the need to improve the education attainment levels of Indigenous peoples through various programs.

Statistics Canada (2014) reported, “in 2006, one-third of the Aboriginal adults aged 25 to 54 had less than a high school education compared to nearly 13% of the non-Aboriginal population” (para. 2). In New Zealand attainment levels are similar with almost half of Māori students not attaining high school or equivalent qualifications compared to one-third of non-Māori students (Statistics New Zealand, 2013b).

In the quest to improve education levels for Aboriginal peoples in Canada, it is imperative to consider strategies that have been successful in other countries with marginalized Indigenous students. Research in both Canada and New Zealand has produced academic papers recording Aboriginal/Indigenous voices in which students express what they need from teachers to succeed in school (Bergstrom, Cleary, & Peacock, 2003; Berryman et al., 2014; Bishop & Berryman, 2006; Hare & Pidgeon, 2011; Ireland, Hawryluk, Medeiros, & Paris, 2012; Kanu, 2002; 2006; 2011; Neeganagwedgin, 2013; Parent, 2011; Preston & Claypool, 2013, Silver, Mallet, Greene, & Simard, 2002). However, more studies focusing on teacher perspectives and practices that enhance Indigenous students' academic achievement are needed. As a result, this study asks what practices and strategies do teachers of Indigenous students perceive as effective in improving student motivation, engagement, and retention? And, do these practices and strategies result in greater academic success for Indigenous education attainment?

This article identifies and presents internationally recognized strategies used by teachers in New Zealand that have resulted in greater educational performance among Māori students. This success has been documented by New Zealand's National Certificate of Education Achievement (NCEA) over a six-year period following the introduction of a teacher professional development program named Te Kotahitanga. Māori student achievement increased from 32.4% in 2009 to 70% in 2014 (Wharekurapersonal correspondence, August 4, 2015)¹.

Before exploring these teaching strategies, I provide a few caveats and definitions of the terms used in the study. I provide background information on the foundations of the Te Kotahitanga Effective Teacher Profile (ETP) followed by the research methodology that directed this study. This is followed by a presentation of the findings enriched with the voices of the teacher participants. Finally, I provide an analytic discussion that draws upon existing literature and situates the findings through the lens of critical race theory. Throughout this article, I highlight the instrumental roles that teachers hold in nurturing their students. This is a timely topic as teacher-centred experiences and perceptions from this study may offer guidance for policy planners, government leaders, university education leaders, professional development schools, education administrators, and educators of Aboriginal students.

Caveats and Terminology

Prior to presenting the details of this study, some caveats are required. Although there are striking similarities among the histories of Indigenous peoples of Canada, United States, New Zealand, and Australia, this study does not attempt to consider all Indigenous people as homogenous. Improving education outcomes is a shared odyssey of these countries. It is not purported that the findings are to be a panacea to the marginalization of all Indigenous peoples. Successful and unsuccessful education initiatives from other countries should be shared and reviewed with a critical eye as all countries can learn from one another. The purpose of this study is to report the findings of education strategies and not to imply or compare similarities beyond education.

Different researchers and countries use various terminologies in academic literature; for the benefit of the reader, clarification of terminology is required. According to Aboriginal Affairs and Northern Development Canada (AANDC, 2010), Aboriginal peoples are defined as "the descendants of the original inhabitants of North America. The Canadian *Constitution* recognizes three groups of Aboriginal people—Indians [First Nation], Metis and Inuit. These are three separate peoples with unique heritages, languages, cultural practices and spiritual beliefs" (para. 3). The

¹ A pseudonym is used to keep the anonymity of the school. "Wharekura" in Māori means "house of learning" or "school."

United Nations (2014) defines Indigenous as people who are descendants “of those who inhabited a country or a geographical region at the time when people of different cultures or ethnic origins arrived” (para. 1). For clarification, the Māori people of New Zealand and Aboriginal people of Canada are both Indigenous. The different titles and terms will be referenced as they appear in original text, and in the discussion below, the terms “Indigenous” and “Aboriginal” will be used interchangeably.

Background information: Te Kotahitanga Effective Teacher Profile (ETP)

Te Kotahitanga Effective Teacher Profile (ETP) is a theory-based educational reform that began in 2001 and is based on the narratives of the Māori children (Bishop & Berryman, 2006). Relevant academic literature forms the basis of the ETP as a professional development tool for teachers (Bishop, O’Sullivan & Berryman, 2010). The ETP adopts an agentic position and rejects deficit theorizing through culturally appropriate and responsive pedagogy that builds relationships between teachers and their students.

The Te Kotahitanga ETP is comprised of six observable components: (a) Manaakitanga: building and nurturing a supportive environment that is culturally responsive; (b) Mana motuhake: caring about each student’s classroom performance and helping the child to develop identity, independence as well as group identity; (c) Whakapiringatanga: creating a safe learning environment; (d) Wananga: engaging the Māori students as Māori; (e) Ako: using a variety of teaching strategies to promote interaction among learners and to build relationships; and (f) Kotahitanga: collaborating to improve Māori education achievement through monitoring and reflecting (Bishop et al., 2010).

Over the years, reports about the effectiveness of Te Kotahitanga have provided student achievement data, observation, self-reports and interviews documenting sustainability and improvements in student outcomes. The key findings show that as teachers build on their capacity through implementing the ETP, their Māori students experience continuous improvement in numeracy and literacy external examinations (Bishop, Berryman, Wearmouth, Peter & Clapham, 2012). It has been noted that the integrity of the ETP requires leadership and support to maintain its effectiveness in the classroom. The following section will describe the methods used in this research.

Research methodology

This research used a case study collection strategy to identify and understand the teacher strategies used to help Māori students improve their educational attainment levels. The New Zealand teacher participants perceived the strategies as supportive and contributive to the educational success of their Māori students in Grades 7 to 13. The research findings are the researchers’ interpretations of the teachers’ experiences, which represent truth and reality. McMillan and Schumacher (2010) explain that the constructivist design “focuses on the perspectives, feelings, and beliefs of the participants” (p. 237). This study used the theoretical lenses of critical race theory (Milner, 2008) from the constructivist paradigm. Milner explains that “critical race theorists are concerned with disrupting, exposing, challenging, and changing racist policies that work to subordinate and disenfranchise certain groups of people and that attempt to maintain the status quo” (p. 333). Critical race theory explains how Indigenous peoples’ experiences of race and racism are deeply rooted in the dominant society through power and privilege, and “are ingrained and deeply imbedded in the policies, practices, procedures, and institutionalized systems of teacher education” (Milner, 2008, p. 332).

The researcher was a partial participant who spent time at a school assisting students with their classwork. This role helped the researcher establish a rapport with the participants, gain a

sense of the school dynamics and the classroom culture, and witness teacher-student and student-student interactions. A journal was kept of the activities and observations. Semi-structured interviews were used to probe the witnessed interactions, adding richness to the findings.

The methodological strategy used in this research, which was congruent with an Aboriginal worldview (Acoose, Blunderfield, Dell, & Desjarlais, 2009; Kovach, 2009, 2010; Torrance, 2011, Wilson, 2001), considered the participants as partners by hearing and recording their voices. The framework of this research was relationship-based, conversational, and was designed to support Indigenous communities by sharing the information obtained from this study. The majority of the teacher participants' students in the study were Māori.

Participant selection and data collection

The school selected implemented the Te Kotahitanga program in 2009, and the improvement in student achievement at the school was recognized to have benefited not only Māori students but all students of that school (Wharekura, personal communication, August 4, 2015). This accomplishment was recognized at an international education conference. The independent data collected by the NCEA for Grade 12 students indicated that Māori students at the school had a 32.4% achievement level in 2009, well below the national level of all Grade 12 students of 65.6% and the national Māori achievement level of 52.9%. By the completion of the 2014 academic year, Grade 12 Māori students at this school had a 70% student achievement level. The achievement levels attained in 2014 surpassed the Māori national standards at 67.8% which came close to matching the national level of 75.4% (Wharekura, personal communication, August 4, 2015; New Zealand Qualifications Authority, 2014).

At the time this research was conducted in 2014, the school for this case study housed grades 7 to 13 with a school population of 420 students. The middle school was comprised of grades 7 to 9 with approximately 90% Māori students, while the upper grades from 10 to 13 had approximately 55% representation of Māori students. New Zealand ranks the socioeconomic status of the school by decile rating with the lowest socioeconomic population documented as decile one and the most affluent ranked at decile 10. The school of this research ranked at decile two.

Interviews were conducted with seven participants. Five were classroom teachers of which three were also administrators. One was also a resource teacher of learning and behavior, and another was a restorative facilitator. The questions were semi-structured, open-ended, and specific to the intent of the research. The interviews each lasted approximately one hour. After the transcriptions were approved by the participants, the transcripts were coded and recoded several times for accuracy; key concepts emerged and five dominant strategies discovered from the research process will be discussed in the following section.

Limitations

There are limitations to this study. As this is a case study of one school that had been recognized nationally and internationally for improved education outcomes according to New Zealand government standards, the findings can be considered small. The documented achievement levels are government standards set by the New Zealand NCEA for Grade 12 students. There were seven participants and the findings were saturated at that number. There was one self-declared Māori participant; however, the focus of this study was on teacher practices and not on the influence of Māori teachers compared to non-Māori teachers.

Findings

The main question posed was what were the dominant teacher strategies that had contributed to the improved educational outcomes for the Indigenous students of this school? This question revealed five dominant strategies: building and repairing relationships, student-focused school and classrooms, teachers' feedforward and feedback, culture in the classroom, and administrative leadership. These strategies will be described below. To add credibility and context to the surfaced strategies, direct quotes will be included from the participants' transcribed interviews as well as notes from the researcher's journal. The names presented are pseudonyms.

Building and repairing relationships: A relationship-based pedagogy

When asked what strategies the teachers felt were the most effective for students to improve education outcomes, the answers revolved around building relationships and creating a parent-child relationship. It was explained that these interactions demonstrated care and concern for the student. This relationship-based pedagogy was believed to enhance effective interactions. Relationships were built and maintained through a style of teaching that was described as discursive, in which the teacher demonstrated value and respect for the student. As Edward observed,

It is about me teaching in a way that the kids know very quickly that I am open to what they think and I value what they think . . . I can close that down very quickly by the way I speak, the way I act or if I don't follow up on their ideas . . . The trust has to be built by letting them know that I am willing to listen.

Another participant Charles also spoke about listening and responding to the student's voice; embracing "the concept of power sharing with the children and the elements of self-determination" which represented a respectful relationship between the student and the teacher.

Teacher meetings maintained an attitude of respect for the students. Teachers met regularly in co-construction meetings to discuss student progress and to identify students that may need extra support. The teachers at the meeting instructed different subjects but shared the same students. This allowed them to identify if a student needed extra work in one subject area or was experiencing a generalized academic concern. In her description of a co-construction teachers' meeting, Felicia noted, "we start with a prayer, then we talk about the guiding principles of the meeting; that is, we will discuss our students as if they were our own children." The researcher also witnessed this attitude at the beginning of other school meetings. The teacher assumed a parental role, and all conversations with students were caring and concerned, as if it were their own children. This was further demonstrated when the researcher witnessed Alice's telephone alarm going off, and Alice went to one of her students to remind her to take her medicine.

At the beginning of the school year, Grades 7 and 9 are the first points of entry for many students. Alice shared, "at the beginning of the school year we don't teach for the first week or two weeks. We are building those relationships. If we started off straight away to teach we would start building conflict with students and the kids would develop conflict among other students." Various teacher participants explained that it could take the form of sports, arts, plays, music or games to learn students' names. Teachers used a variety of adventure-based learning (ABL), co-operative or orienteering games to familiarize the students with the school and one another. Edward who taught higher-grade level students also shared how he focused on relationship building through ABL games: "it is about breaking down the barriers and to get people interacting with each other. I participate because that is really important. We take two or three days with the level ten class so that is two to three hours of the class doing ABL."

In some cases, teachers went beyond being the students' teacher to connect with them on an interpersonal level. As Alice stated,

I have opened myself up to my students. Letting the students know who I am rather than me just being the teacher . . . The kids know me and I know my kids. I could list at least ten things about each of my kids in my class . . . By being able to do that you can connect with them on a different level. They respond to you better.

Alice further explained that the interpersonal connection has been achieved through Facebook. There was often a flurry of messages in the morning among the students to remind one another to bring their gym clothes. If the student does not bring gym clothes, they cannot participate in the gym class activities.

Edward stated that it was the interpersonal connections that really affected learning. He reflected, "It is to make that time to make that meaningful connection, getting next to them and having meaningful conversations with them about their learning." Similar relationships were also built with the students' parents through constant contact and texting. The relationships among the teachers, students, and students' parents were extended when the teachers walked to the gates and saw the students off at the end of the school day. This provided opportunity for teachers to meet with the parents, students, or alumni who are siblings of students.

Relationships had their challenging times. The school had a Restorative Thinking Room and a restorative facilitator. If the students could not resolve their differences among themselves or if a teacher and a student had issues that they could not resolve, the student would talk with the restorative facilitator and a restorative meeting would be set up involving the facilitator, teacher, and student. Initially, it was the teachers' responsibility to build the relationship in the classroom with each of the students. Donald reflected on this successful learning environment and stated the following:

I think a lot of that [positive learning environment] has to do with the restorative justice process that we have set up because that means that people can't bare grudges, people get things out in the open, talk about things in a productive way to try to get the kid back into the classroom.

Teachers perceived that building good teacher-student relationships, performing reflective practices, and instilling restorative justice were keys to the improved education environment and successful education outcomes. Gail explained the success of the restorative program as she remarked, "if they don't care about each other [the student and teacher] at all or know anything about each other, it is very hard for them to reflect and worry about if they are upsetting someone." During the process of restorative justice, the student was asked to reflect on the relationship, on what happened and how to deal with the facts, and how the actions have affected others around them. Reflecting on the consequences of the action is the aim of the restorative justice:

It is a standard thing that if you care about someone and you respect them, then you are going to care about how you are making them feel. That is what the restorative meetings are about. It is not necessarily about the actions that the kids have done but it is about the consequences, about what they have done.

The restorative justice program was not part of the Te Kotahitanga program; it was introduced at this school to compliment the program, and was recognized by the teacher participants as pivotal in maintaining and building relationships at this school.

Student-focused school and classrooms

The next dominant strategy that emerged from the study was the focus on the needs of the students. It was explained that students' progress through the grade levels sequentially and no student is held back to repeat a grade level. This creates a classroom with students at various levels of knowledge and skills. The various classes the researcher observed were testimony to this. The teacher had various structures and activities in place to accommodate all students. Classroom sizes would vary from 12 to more than 20. The classroom was not unified with a single lesson being taught for the day. Instead, the teacher might start with a brief announcement or minimal instruction. Students would get their workbooks or textbooks and carry on from where they had stopped working.

Donald explained that because he has students at different levels, he has to have something for everyone to do which allows him to move around to the students that are really struggling or disengaged to help them and get them engaged. The researcher observed that the teachers circulated from student to student as they used an arsenal of activities that allowed the students to work at their own pace and individual levels to accomplish the learning outcomes required for the National Standards credits. Upon completion of coursework, students earned credits that are accumulated to earn different achievement levels according to the NCEA.

Student focus also covered the course work that the students study or write about. The topics were reported to be relevant and interesting to the students. As Charles explained,

We try to bring the student's background into the classroom whether that background is their own Māori culture, whether it is their own youth culture, or their own family, whether it is things they are interested in. It is about trying to connect with them on a relationship level but also to connect them with the content that you are doing in the classroom to give relevance to them.

The teachers perceived that if the students did not see the purpose of what they were doing, they would not be engaged.

Betty explained that she would review the reading and writing levels of the students and request extra support to help them. In her class, she would write the information on the white board for students to copy and practise their writing skills. She would also have a copy on the table for the students to read. If some students could not finish writing the information, she would cut off the missing part from the paper copy to put into the student's book. She felt it was important to know her students and help them succeed with support if necessary. For those students who could accelerate in the class, they were offered the opportunity to delve deeper into a subject and be challenged.

Some grade levels, such as Grade 9, had many students enrolled. There were three classrooms of Grade 9 students, and they were allowed to choose what class (hub) they were divided into. They could choose from sports hub (games, sports, and statistics focused), discovery hub (inquiry based) or expressive hub (arts, drama, and music). The curriculum was taught through those concepts. The teachers commented that since students select their hub of interest, they tend to get along better because they are with like-minded students, and that gives them "a lot of empowerment and ownership." In Alice's class, the different levels of readers were also split into groups and then further separated by gender. Alice explained that this flexibility engaged the students, "especially to get the boys engaged in the reading. The boys have been reading about cricketers, rugby players, adventurers, horror stories, and worlds under the sea; whereas the girls have been reading about fairy tales, princesses and the frog because they still love that, they love romance novels."

In an effort to meet the needs and interests of the students, the school focused on providing classes that would earn the students credit. The student subject-selection booklet provides students with various core classes in addition to elective classes in tourism, media studies, horticulture, visual arts, performing arts, Māori art and performing arts, hospitality, food and nutrition, catering, digital technology, construction, Māori language, physical education, and outdoor education.

The learning and social environments created were flexible and varied to meet the needs of all the students in the classroom and the school. The learning outcomes were met while teaching each student in the classroom at the level where they could experience learning success. A one-size-fits-all classroom did not exist in this school. Front-of-the-classroom instruction in a synchronous manner was also non-existent since the program was introduced.

Teachers' feedforward and feedback: An effective conversation

Feedback in the classroom was a strategy of regular teacher practice. Teachers provided feedback orally or in written form to tell the student what they had accomplished. The mantra of this school was "Don't tell what you can ask." This statement defines the strategy of feedforward where intentional questions are posed to the student to generate reflection and critical thinking to solve problems or improve classwork. Teachers described feedforward as a hard task to learn to do with their students. There is an urge to tell a student what needs to be done next rather than allowing the student to think through the process. Feedforward allows learning and reflection to come from the students, as Edward explained:

You can be more effective by having the student reflect and ask them how they did or why they think they did that well. It is not telling the kid but asking. How do you think you could improve this paragraph? Feedback is what they have done and feedforward is what *they* need to do next by asking them and not telling them.

The participants acknowledged that this shift in teaching strategy did not come naturally but has to be developed with practice. Some teachers practised how to ask questions. Edward described that in the beginning stages he had a piece of paper on his desk to help him ask the feedforward questions. He consciously asked the questions, and intentionally did not want to impede the students academically through his response. In the class dynamics, this practice must be learned to the point that it becomes automatic and part of a teacher's language in the classroom. Examples of positive academic feedforward questions include the following:

- What is the next step?
- Expand on that thought.
- How will you show that?
- What else would be useful?
- How could you . . . ?

Felicia indicated that there were many shifts in the teachers' language and in the classroom and the shifts were significant.

In the classroom, it was reported that traditional teaching was still required to a certain extent but the *front of the room teaching* was minimal. Instead, the teacher was "roaming" or "constantly moving" to provide one-on-one or small-group assistance to the students. Felicia explained that with discursive teaching, the students were not passive recipients of knowledge. The questions posed by the teacher were focused on getting the students thinking for themselves. Felicia further explained that since feedforward academics required each student to take their

thinking to a higher level, discursive teaching and feedforward academics questioned the students to make them more engaged and active participants. As Felicia stated, “[discursive teaching] is asking questions around prior knowledge . . . Discursive is interactive. The students are interacting and the teacher’s language facilitates that.”

Feedforward was also an important part of the restorative process. In a situation where the student disagreed with a teacher or another student or misbehaved in the classroom, the student was asked to reflect on what they were doing and how it was affecting everyone else around them. This process may begin with a one-on-one session between the student and the teacher. The purpose was to restore the relationship to a positive state but not through “you” language. The students were asked questions so they can reflect on their actions and reveal their own answers. If a resolution was not attained, the student would be asked to go to the Restorative Thinking Room to reflect on the situation and talk to the Restorative Facilitator. Gail reported that the restorative session began with a discussion with the student:

What happened? Who did you affect? Who was affected by what you did? Who was upset? Who was angry? Who was distracted? How do you think they felt about it? Were they angry? Were they annoyed? Were they not working because you distracted them? Was the teacher getting frustrated? . . . It is to get them to come up with the answers.

The facilitator would have a conversation with the student and the teacher independently, followed by a restorative meeting with both of them. The focus is on the facts, not past history. Gail noted,

The groundwork has to be done by the teacher initially. It is very hard if I am trying to run a restorative meeting and if there is absolutely no relationship established between the teacher and the student . . . It is a standard thing that if you care about someone and you respect them, then you are going to care about how you are making them feel.

The restorative process was noted as a better approach than suspension from school or a student leaving the classroom angry without any follow-up discussion. Gail explained that if “nothing is followed up, then it sits there and it builds and builds and then the next time something happens it is building on top of that.” Through effective conversations by using feedback and feedforward, there are benefits in the students’ learning process and in restoring relationships to create a better learning environment.

Bringing Māori Culture into the Classroom

Māori culture was present in the school and in the classroom. Students were offered Māori language classes, Whakairo academy (Māori arts), Māori performing arts, and traditional carving classes. The school also celebrated special Māori occasions and events such as the Matariki, a celebration of the Māori New Year; they also hosted a festival that was student-organized, and invitations were extended to other schools in the area. These events were under the direction of the school Elders who were readily available to provide guidance.

The philosophy of the school was built on a cultural-responsive pedagogy of relations. The school values revolved around Māori terms. Manaakitanga means respect, Whanaungatanga means belonging and family, and Hirangatanga means excellence in effort. These values were discussed in the classroom and translated into appropriate classroom behavior. When the Māori values were discussed, the students were reported to take the conversation seriously as Māori terms are sacred words. Charles explained that the Māori terms of Manaakitanga, Whanaungatanga, and Hirangatanga form the basis of the relationship-based pedagogy, discursive interaction and questioning.

Betty explained that using the Māori language in the school had been a factor in building relationships with the Māori students. Indeed, language usage could be extrapolated to have had an effect on the improved education outcomes for the Māori students. Alice echoed the importance of Māori values when she stated, “those [Manaakitanga, Whanaungatanga and Hirangatanga] are all underlying now and are weaving through our teaching and planning.” Donald reinforced that the school’s focus was to improve education outcomes for Māori and to help Māori students succeed as Māori. This definition of success is within the Māori context. He further explained:

A lot of the Māori kids are profoundly Māori and yet they live in a dominant Pakeha [white] world that when you actually start to scratch the surface you start to see these things that are deeply important to them so what we have to do is understand the importance of having good relationships with these kids, understand the way they do things and not just about the way we do things.

The Māori culture together with the school values—Manaakitanga, Whanaungatanga, and Hirangatanga—as well as the approach taken within the school all assisted in the restorative relationship process. These values helped create the Positive Behaviour for Learning (PB4L), which was a definite guideline for the expectations held for the students in the classroom. Appropriate behaviours were taught in the classroom, and were used to assist the facilitator to restore the relationship. As Gail described,

If I am dealing with an incident around behaviors that fall into that category it gives me something to work with . . . Are we showing Whanaungatanga [belonging and family]? Is this how we act? It is just another way of teaching them the correct behaviours or the behaviour we want to encourage them to use . . . There are real definites there. The three things together all build around good relationships and the behaviors we are trying to encourage them to use.

The strategy of incorporating culture also appeared to contribute to the relationship-based pedagogy approach, and was related to the effectiveness of a student-focused approach by being respectful of students and nurturing the students’ academic growth.

Administrative School Leadership

Leadership is a critical intentional strategy that underpins the improved outcomes of Indigenous students at this school (Bishop et al., 2012). The application to the Ministry of Education to bring Te Kotahitanga to the school was initiated by the principal and the school qualified due to the number of Māori students attending. Once approved, teachers were asked to volunteer to participate for the first year of the program. They were supported through training sessions, and administrators were active participants in the program.

The participants in this research acknowledged that many administrators and teachers talk about the need for change to help Indigenous students succeed. They agreed that initiatives are hard to implement and even harder to keep alive. Alice, for example, talked about the need to improve Māori achievement levels and explained that “it was talked about in other schools but it was never specifically actioned. It was something we talked about, and we really should do it, but nothing happened. But here we live it, we breathe it.” The participants also said that while one teacher can make a difference, school-wide efforts and the leadership of the school administration played an important role in enabling them to impact student education outcomes. They also said the program offered regular professional development opportunities for teachers. Alice identified leadership as a main contributing factor to the success of their school; she stated that the leader was “passionate and his passion filters down to us. But it is not just the passion. He is walking the walk that we talk about and we learned the philosophy behind it.”

The administration had also identified other determinants to the academic success of students such as the ETP, Restorative Thinking Room, and co-construction meetings. Although the school no longer receives the Te Kotahitanga program funds, the administration continues to fund the learning and behaviour resource teacher who regularly conducts ETP assessments and supports the teachers in professional development. The Restorative Thinking Room and the restorative facilitator position were not components of the Te Kotahitanga teacher professional development program. However, the leadership team deemed them to be critical elements in student achievement improvements, which resulted from improved relationships between students as well as between students and teachers. Numerous co-construction meetings of teachers and administrators were scheduled as part of the leadership process to determine student progress and to provide intervention or support where necessary to achieve the education successes.

Leadership was a driving force contributing to a student-focused atmosphere where students and administrators regularly collaborated to produce school newsletters, student-driven assemblies with performances provided by students, and celebrations and social events organized and directed by students with the support of Elders. Students were recurrently requested to complete an anonymous survey to provide feedback on the school and the teachers. They were also encouraged to provide suggestions for improvements. This represents a school environment with a shared leadership atmosphere among teachers, administration and students.

Discussion

This research revealed five dominant strategies that improved education outcomes for Indigenous students:

- 1) Relationship-based pedagogy that builds and repairs relationships;
- 2) A school with classrooms that are student-focused;
- 3) Providing feedforward and feedback to students;
- 4) Bringing Māori culture into the school and the classroom;
- 5) Administrative leadership.

For these strategies to be implemented effectively, teachers had to reflect on their attitudes towards their students. As Charles stated,

The imperative [situation] is that Māori students were under-achieving and no matter what we have done they are still under achieving nationally and locally. So we had to turn the status quo on its head. And here was a nationally based research project that was actually proving to be effective. It starts with people's attitudes; the teacher's attitude . . . maybe they [teachers] do have an impact on how students feel about school and interact in school . . . that is probably the biggest challenge.

Deficit-thinking mentalities perpetuated the low achievement levels and the cyclical stereotyping of the minoritized group by placing blame either on the student, the student's socioeconomic situation, or various other potential influences and stake little or no claim to responsibility or agency (Bishop & Berryman, 2006; Bishop et al., 2010; Freire, 1970; St. Denis, 2007). The teachers' attitudes and the student-teacher relationship is the foundation of this school's reform, which was demonstrated by the teacher participants through a genuine parental-like attitude. A positive interaction with their students created an agentic, nurturing environment that supported academic performance by following the creed of Te Kotahitanga and ETP guidelines. This created reciprocity of respect. Research indicates that the most powerful influence on education achievement improvements come through relationships and teacher-student interactions that reject deficit thinking (Bishop & Berryman, 2006; Bishop et al., 2010; Riley & Ungerleiger, 2012). The

teachers' use of feedback and feedforward also exemplifies a technique that rejects a hegemonic and paternalistic approach to teaching and values the student and his or her voice. Upon the introduction of the ETP, each school year saw continuous improvements to education attainment levels.

The participants also found that the implementation of the Te Kotahitanga program resulted in a change in student attitudes; aggressive responses disappeared once the teacher practice shifted to the ETP. Prior to the ETP, the classroom and school were volatile. Some teacher participants reported regular fights among students and at times teachers were concerned about their own safety. The shift in the teachers' attitudes to being more supportive, caring and respectful became the change agent that resulted in a less defensive response from students including a demonstrated mutual respect to their teachers and classmates. Teacher efficacy beliefs can create a self-fulfilling prophecy that will affect the potential of students (Preston & Claypool, 2013; Riley & Ungerleider, 2012). The restorative process also assisted in this transition to build and repair relationships. The researcher witnessed an overall sense of contentment in and outside the classrooms.

Student-focused teaching strategies where students learned at their own pace and at a level that they can succeed emerged as a dominant theme. Māori students appreciated the flexibility in the classroom where they learned about topics that were relevant to them in a style that benefitted them. These are considered motivators for students to succeed academically (Demmert, 2011; Kanu, 2006; Preston & Claypool, 2013).

The presence of Indigenous culture is closely tied to the student-focused classroom and relevance of the class material. Research indicates that the incongruence between the culture of Indigenous students and the school environment is a main contributor to school failure and negative learning experiences (Kanu, 2006). Kanu explained, "socio-cultural theories link the development of children's thinking, communication, learning, and motivational styles with the culture into which they are socialized, and posit that an intricate connection exists between culture and student learning" (p. 120). Culturally responsive teachers are vital when including cultural knowledge, language, and ceremony as part of the school curriculum, and are appreciated contributors to improving education outcomes for Indigenous students (Demmert, 2011; Kanu, 2006; Preston & Claypool, 2013). Indigenous students proudly embrace their heritage, and the acceptance of culture builds self-worth and self-esteem within students (Kanu, 2006; 2011).

Special note is taken regarding the importance of leadership in the successful implementation of the ETP and the overall success of the school. Recognizing disparities between social groups and Indigenous and non-Indigenous students was a primary catalyst. However, a desire and passion to initiate change was also present. Leadership is at the heart of the strategic changes provided by the ETP that transform teacher practices and address the inequitable practices that were affecting Maori student success. The principal and administration led change by creating a learning environment that was inclusive, respectful and relinquished hegemony, providing the link between education and social context. Shields (2010) explored the effects that principals had on making schools more inclusive and socially just and, as demonstrated in this case study, those schools reaped the academic rewards.

The strategies implemented by the teacher participants and the professional development ETP appeared to effectively improve Māori students' academic achievement levels. Within the five dominant strategies were various attributes that emulated the ETP. The teachers demonstrated genuine care for the students, dedication to student success, constant monitoring and co-construction, incorporation of culture, and culturally responsive teaching that builds relationships and provides a safe learning environment.

Future studies may inquire about the perceived teacher strategies that contribute to improved education outcomes in the Canadian context. Case studies and success stories can reveal which teacher strategies motivate students and assist them in succeeding academically. This exploration could reveal the commonalities and contrasts between academic papers that have recorded the voices of Aboriginal/Indigenous students' reporting what they need from teachers to succeed in school and what teachers have provided them that resulted in academic success. This could be followed with a comparative inquiry between New Zealand and Canada. Combining the student perspective with the teacher perspective provides a wholistic view that could contribute to a model of education success for Indigenous students. From a professional development perspective, the exploration of teaching strategies benefitting Indigenous students and improving education attainment levels could be a foundation for a Canadian ETP to assisting both in-service teachers and pre-service teachers.

References

- Aboriginal Affairs and Northern Development Canada (AANDC). (2010). *Aboriginal Peoples and Communities: Terminology*. Retrieved from <http://www.aadnc-aandc.gc.ca/eng/1100100014642/1100100014643>
- Acoose, S., Blunderfield, D., Dell, C. A., & Desjarlais, V. (2009). Beginning with our voices: How the experiential stories of First Nations women contribute to a national research project. *Journal of Aboriginal Health*, 4(2), 35-43.
- Bergstrom, A., Cleary, L., & Peacock, T. D. (2003). *The seventh generation: Native students speak about finding the good path*. Charleston, WV: ERIC.
- Berryman, M., Carr-Stewart, S., Kovach, M., Laliberte, C., Meyer, S., Merasty, B., . . . Steeves, L. (2014). *Seeking their voices: Improving Indigenous student learning outcomes*. Regina, SK: University of Regina.
- Bishop, R., & Berryman, M. (2006). *Culture speaks: Cultural relationships and classroom learning*. Wellington, NZ: Huia Publishers.
- Bishop, R., O'Sullivan, D., & Berryman, M. (2010). *Scaling up education reform: Addressing the politics of disparity*. Wellington, NZ: Nzcer Press.
- Bishop, R., Berryman, M., Wearmouth, J., Peter, M., & Clapham, S. (2012). *Te Kotahitanga: Maintaining, replicating and sustaining change*. Ministry of Education, NZ: Education counts.
- Demmert, W. G. (2011). What is culture-based education? Understanding pedagogy and curriculum. In J. Reyhner, W. S. Gilbert & L. Lockard (Eds.). *Honoring our heritage: Culturally appropriate approaches to Indigenous education* (pp. 1-9). Flagstaff, AZ: Northern Arizona University.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum.
- Government of Canada. (2015). *Canada's Economic Action Plan*. Retrieved from <http://actionplan.gc.ca/en/initiative/first-nations-education-act>
- Government of Saskatchewan. (2014). *Ministry of education: Plan for 2014-15*. Retrieved from <http://www.finance.gov.sk.ca/PlanningAndReporting/2014-15/EducationPlan1415.pdf>
- Haldane, S., Lafond, G. E., & Krause, C. (2012). *Nurturing the learning spirit of First Nations students: The report on the national panel of First Nation elementary and secondary education for students on reserve*. Retrieved from <http://www.afn.ca/uploads/files/education2/national-panel.pdf>
- Hare, J., & Pidgeon, M. (2011). The way of the warrior: Indigenous youth navigating the challenges of schooling. *Canadian Journal of Education*, 34(2), 93-111.
- Ireland, L., Hawryluk, J., Medeiros, J., & Paris, R. (2012). *Understanding pathways of Aboriginal education achievement: A comparative summary of Aboriginal youth graduates and non-completers survey*. Calgary, AB: United Way.
- Kanu, Y. (2002). In their own voices: First Nations students identify some cultural mediators of their learning in the formal school system. *Alberta Journal of Educational Research*, 48(2), 98-121.
- Kanu, Y. (2006). Getting them through the college pipeline: Critical elements of instruction influencing school success among Native Canadian high school students. *Journal of Advanced Academics*, 18(1), 116-145.
- Kanu, Y. (2011). *Integrating Aboriginal perspectives into the school curriculum: Purposes, possibilities, and challenges*. Toronto, ON: University of Toronto Press.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*. Toronto, ON: University of Toronto Press.

- Kovach, M. (2010). Conversational method in Indigenous research. *First Peoples Child & Family Review* 5(1), 40-48.
- McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry*. (7th ed.). Boston, MA: Pearson.
- Milner, H. R. (2008). Critical race theory and interest convergence as analytic tools in teacher education policies and practices. *Journal of Teacher Education*, 59(4), 332-346.
- Neeganagwedgin, E. (2013). A critical review of Aboriginal education in Canada: Eurocentric dominance impact and everyday denial. *International Journal of Inclusive Education*, 17(1), 15-31.
- New Zealand Qualifications Authority. (2014). *Annual report on NCEA and New Zealand Scholarship Data and Statistics (2014)*. Retrieved from <http://www.nzqa.govt.nz/assets/About-us/Publications/stats-reports/ncea-annualreport-2014.pdf>
- Parent, A. (2011). "Keep us coming back for more": Urban Aboriginal youth speak about wholistic education. *Canadian Journal of Native Education*, 34(1), 28-48.
- Preston, J. P., & Claypool, T. R. (2013). Motivators of educational success: Perceptions of grade 12 Aboriginal students. *Canadian Journal of Education*, 36(4), 257-279.
- Riley, T., & Ungerleider, C. (2012). Self-fulfilling prophecy: How teachers' attributions, expectations, and stereotypes influence the learning opportunities afforded Aboriginal students. *Canadian Journal of Education*, 35(2), 303-333.
- Royal Commission on Aboriginal Peoples. (1996). *Report of the Royal Commission on Aboriginal Peoples* (Vol. 3). Ottawa, ON: Minister of Supply and Services Canada.
- Sharpe, A., & Arsénault, J. (2009). *Investing in Aboriginal education in Canada: An economic perspective*. Ottawa, ON: Canadian Policy Research Networks.
- Shields, C. M. (2010). Transformative leadership: Working for equity in diverse contexts. *Educational Administration Quarterly* 46(4), 558-589.
- Silver, J., Mallett, K., Greene, J., & Simard, F. (2002). *Aboriginal education in Winnipeg inner city high schools*. Ottawa, ON: Canadian Centre for Policy Alternatives.
- St. Denis, V. (2007). Aboriginal education and anti-racist education: Building alliances across cultural and racial identity. *Canadian Journal of Education*, 30(4), 1068-1092.
- Statistics Canada. (2007). *Saskatchewan (Code47) (table). Aboriginal Population Profile. 2006 Census*. Statistics Canada (Catalogue no. 92-594-XWE). Retrieved from <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/index.cfm?Lang=E>
- Statistics Canada. (2014). *Education*. Retrieved from <http://www.statcan.gc.ca/pub/89-645-x/2010001/education-eng.htm>
- Statistics New Zealand. (2013a, July). *New Zealand Official Yearbook 2012*. Retrieved from <http://www.stats.govt.nz/>
- Statistics New Zealand. (2013b). *2013 Census*. Retrieved from <http://www.stats.govt.nz/Census/2013-census.aspx>
- Torrance, H. (2011). Qualitative research, science, and government: Evidence, criteria, policy and politics. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 569-580). Thousand Oaks, CA: SAGE.
- United Nations. (2014). *Indigenous peoples, Indigenous voices factsheet: Who are Indigenous peoples?* Retrieved from http://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf
- Wilson, S. (2001). What is Indigenous research methodology? *Canadian Journal of Native Education*, 25(2), 175-179.

Theresa (Therri) Papp is a Ph.D. candidate at the University of Saskatchewan. She is a SSHRC recipient with her research focuses on Aboriginal students, which includes the areas of gamification, entrepreneurship and teacher practices. She can be reached at therri@skmconsulting.ca or the.papp@sasktel.net