Jeremy Dorovolomo
Govinda Ishwar Lingam *Editors*

Leadership, Community Partnerships and Schools in the Pacific Islands

Implications for Quality Education

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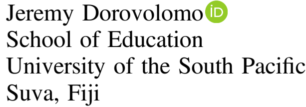
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Foreword

This is a significant collection of research findings from the School of Education at the University of the South Pacific (USP). The school has a long and proud tradition of teaching, research and scholarship spanning over fifty years, as does the wider university in which it plays such an important role.

Established by Britain in 1968, USP was designed to serve the needs of its colonial jurisdictions across the island groups of the Southern and Central Pacific. With quite remarkable foresight, the university was developed as a regional institution serving the needs of eleven separate groups, most of which became independent nations between the 1970s and 1980s. Another has since joined. The university is now owned and operated by all twelve of these countries, with each one represented on its governing council. It is an impressive example of regional collaboration. While the main campus, Laucala, is located in the largest country, Fiji, each country, even the smallest, has its own campus that supports an extensive program of distance education.

What motivated the British to establish such an institution? In the mid-1960s, as momentum for independence grew across the Pacific region, there was an urgent need for local educated elites who could assume the roles and responsibilities that had, until then, been the almost exclusive domain of the colonisers. A regional university, staffed predominantly by British academics, was seen as the most effective and efficient way to train a cadre of locals for mid-level roles in the colonial and immediate post-colonial bureaucracies.

At the time USP was established, the relatively few secondary schools across the region likewise were staffed almost exclusively by expatriates. With most countries beginning to expand provisions for secondary education, the British were keen to localise the staffing of secondary schools, and USP provided the ideal solution, so much so that in its first fifteen years more than two-thirds of its graduates were absorbed as teachers into the burgeoning secondary school systems of member countries. Hence, right from the start, the School of Education became one of the largest and most important teaching units within the university, focusing on the provision of teacher education programs.

With a couple of notable exceptions, most staffs of the School of Education in the early years were expatriates from Britain, Australia and New Zealand, and from the very beginning a research culture was encouraged. A separate Institute of Education was established, with the aim of promoting research, consultancy and publishing. A peer-reviewed academic journal, *Directions: Journal of Educational Studies*, was initiated in 1978 to publish research articles, essays and reviews relevant to education in the Pacific. Regular staff research seminars soon became the norm, held in the aptly named *Talanoa* Room in the School of Education.

So successful was USP, along with its School of Education, that by the early 1980s it had largely filled the backlog of teaching vacancies in the region's secondary schools. A major "future directions" review in 1983 therefore recommended significant diversification of USP's teaching programs. From this time, the School of Education began to expand its focus to include early childhood, primary and special education, along with a graduate program in educational administration. Most importantly, graduate research programs at M.A. and Ph.D. level were developed and increasing numbers of Pacific island graduates recruited to the staff of the School.

Another profoundly important transition in the School of Education was the subtle but steady shift from colonial to post-colonial discourses. As increasing numbers of Pacific Island academics completed doctoral studies and joined the staff of the school, pressure grew for a more culturally grounded approach to teaching and research. There was increasing recognition of the rich diversity of cultures of knowledge and learning across the region. Although contested, at least in part by aid donors and some of the remaining expatriate staff, this shift brought new approaches that reflected the values and epistemologies of Pacific peoples.

By the turn of the century, there was a strong sense of ownership of the University throughout the region. It was their university, responding to their needs. Staffing had largely been localised, with Pacific Islanders in most positions of leadership. The impact of aid donors on its ethos and planning was waning. Within the School of Education, the staff had a new sense of confidence to develop teaching programs and research cultures that were uniquely theirs.

And now, in the first twenty years of the new century, the university has achieved a genuine sense of maturity, its identity firmly anchored in the values and traditions of its member countries. This is apparent in the School of Education, both in its teaching programs and its research output. A review of its publications reveals an impressive diversity of research, both in terms of geographical spread across USP member countries and the range of methodologies. It also reveals a deep commitment to applied, culturally grounded research that contributes to improvements in the quality of education across the region.

Which brings us to the present volume: a collection of research papers that were first presented in the collaborative yet probing environment of the School's *Talanga* Seminar Series. The use of the Tongan *talanga* for the series is informative, since it goes further than simply *talanoa* (conversing; talking) to imply interaction with purpose. These seminars, then, are not just about the sharing of ideas, but have the deeper aim of making a difference. And this is clearly evident in all of the papers

herein. Each has a practical focus, most of the research having been designed in response to the real challenges faced by teachers in schools.

Reading through various papers, several words come to mind: cultural diversity; collaboration; community engagement; context. The papers are grounded. One gets a real sense of the struggles that Pacific Island teachers face in preparing their students for success in a globalising world. Throughout the Pacific, teachers grapple with the tension between keeping students strong in their local languages, identities and values while ensuring that they have the skills necessary for survival in the world beyond their shores. And these goals are achieved when teachers respect diversity, listen to communities, engage with families and share ideas collaboratively across the region.

The contributors to this volume reflect its cultural diversity. All are present or former staff members or postgraduate students of the USP School of Education. Most began their higher education studies at USP, and almost half completed their Ph.D. studies there. All are Pacific Islanders, albeit from a range of cultural traditions: Melanesian, Indo-Fijian and Polynesian. Their papers cover a range of contexts, from the smallest USP member country (Nuie), with its two schools, to Fiji, the largest. They also cover all sectors, from early childhood, through primary and secondary and then to university education. The book will be an exceptionally useful resource for pre- and in-service teacher educators throughout the region, given its relevance and accessibility. It has been written by Pacific Islanders for Pacific Islanders.

The book itself is a wonderful celebration of achievement, not only of the school, but of the wider university. The editors deserve warm congratulations for nurturing this research and bringing both the seminar series and the book into being. And the leadership of the university also is worthy of congratulations for ensuring the survival of the institution, and its development into the strong and effective place of research and learning that it is today. But neither the school, nor the university, can rest upon their laurels. The current COVID-19 pandemic poses huge challenges for the effective delivery of education at all levels across the Pacific region. The global world post-COVID-19 will be a very different place, demanding even greater commitment, insight and creativity from educators in the Pacific.

Kangaroo Island, Australia G. R. (Bob) Teasdale
April 2020

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Billy Fito'o is an educator from the Solomon Islands. He has served in the Teaching Service of the Solomon Islands Government since 1985 and assumed the role of Primary School Headmaster and Secondary Principal in 1991. He left the Teaching Service and joined the Public Service of the Solomon Islands Government in 2010. He became the Deputy Director of the Institute of Public Administration and Management (Solomon Islands Government) prior to joining The University of the South Pacific (USP). In his teacher training, he earned a Certificate and

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Chapter 1
Introduction: Contributing to Dialogue About Pacific Islands Educational Issues

Jeremy Dorovolomo and Govinda Ishwar Lingam

Abstract This edited book engages with topics ranging across the educational spectrum from school to university and includes perspectives from a wide range of stakeholders including leaders, teachers, parents and students. Some of the pressing concerns within Pacific Island educational systems continue to be literacy, numeracy and educational leadership. This book presents research which specifically addresses these topics. This volume aims to contribute to the ongoing rich dialogue about Pacific Islands' educational issues in order to help forge positive and healthy school ecosystems that values equality, diversity, community engagement, fruitful citizenship, proactive school leadership and valuable student learning that drives an educated Pacific Islands population into the future. Overcoming educational issues can, in part, be facilitated through the Pacific approach of *Talanga*. The chapters here are a collection of articles presented at *Talanga: The School of Education Seminar Series*, at The University of the South Pacific. The lead editor of this volume serves as Convener of the seminar series, and when this current volume was compiled, the seminar series was at its 121st session. This current volume is the second edited book from the seminar series. *Talanga* is a Tongan concept and word, imbuing purposeful interaction, dialogue and collaboration.

Keywords *Talanga* · School leadership · Community partnership · Quality education · SIDS

In order to respond to the concerns held by Pacific Island leaders over literacy and numeracy, the Secretariat of the Pacific Community (SPC) conducted the Pacific Islands Literacy and Numeracy Assessment (PILNA 2018) in 15 countries in 10 languages. The PILNA uncovered "low levels of student achievement in literacy and numeracy across the region" (SPC 2018, p. 1). The PILNA had also been conducted in 2012 and 2015. The persistent low level of achievement among Pacific Island

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children in literacy and numeracy, reported in the 2018 assessment, presents a grave concern, and island countries must implement workable strategies to combat this negative trend.

School leadership has also come to the fore recently. In the context of the Pacific, school leaders refer to both principals and teachers, but it is the principal who is expected to deal with school authorities, teachers, parents and the education ministry. The education system in the Pacific is still centralised and most of the region still follow the bureaucratic leadership framework. Guided by the argument that the demands of education reforms have changed and expanded, the tasks of school principals in order to improve the quality of education have increased. As a result, principals need further training to implement these reforms. In 2018, Fiji launched the School Prefects Leadership Programme, aimed at developing emerging leaders of Fiji in the school context and their communities (Qaranivalu 2018). Furthermore, the Fiji Ministry of Education emphasised an Open Merit Recruitment and Selection (OMRS) system for selecting headteachers and principals in order to promote modern leadership that would drive a modern education system, accompanied by continued professional leadership development (Prasad 2019). Moreover, Pacific Island countries such as the Federated States of Micronesia, Kiribati, Nauru, Palau, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu gathered in a meeting facilitated by the Secretariat of the Pacific Community (SPC) met to discuss the incorporation of social citizenship, civic education and human rights into existing national curricula (SPC 2017) to enable young Pacific Islanders to respect human rights and support their development towards becoming positive members of their communities. All these factors, and others, affect the quality of education in one way or the other and are current concerns of island countries.

The *Talanga* seeks to listen to everyone's voices, the practice of which begins with reciprocal talking and dialogue. The seminar series aims to capture some of these voices in an edited book that can be useful for Pacific Islands' educators and stakeholders. Authors provide an array of educational issues that would enable education systems, teachers and leaders to decide whether or not they could incorporate suggestions for improvement made in this book. This book can provide reason for purposeful interaction and dialogue among those who have interest in improving students' learning environments and experiences.

The *Talanga* is being explained as a Tongan term for purposeful conversation (Ofanoa et al. 2015) as it is the title of the School of Education seminar series. However, there are other terms that also depict similar sentiments of dialogue, interaction and collaboration such as the *talanoa* (Finau et al. 2011), which have both Tongan and Fijian origins, which is a "conversation, a talk, an exchange of ideas, be it formal or informal" (Vaioleti 2013, p. 192) or *taleanoa*, is Samoan and similar to the *talanoa* which denotes critical conversations (Vaioleti 2013). The *talanoa* is a widely used social research method by many Pacific Island scholars such as in Fiji, Samoa, Solomon Islands, Niue, Hawai'i, the Cook Islands and Tonga (Johnston 2013). In Kiribati, there is the *maneaba,* which is central to its communities as a place to discuss important matters, besides it being used as a court for community infringements, community entertainment and dancing, and a place where travellers can stop

by for the night before they continue their journey (Sofield 2002). These and other forms of Pacific methods of conversation are based on ensuring there is authentic dialogue and these chapters are an extrapolation from the multiple conversations and debates that occurred in the USP School of Education Talanga seminar series in order that they are not only conversations but are also recorded. The conversations and chapters in this book are inadvertently mostly from Fiji and Solomon Islands, which may also depict the current composition of the USP School of Education staffing.

What comprises quality education differs from author to author. According to Patrinos et al. (2014), there are six A's in quality education. The first A is assessment that is continually benched-marked against other countries so that an education system knows where it stands. The second A is autonomy which suggests empowering schools to be competitive through ownership, resources and giving them voice. The third A is accountability where the school and school leaders are held accountable to parents and the community including the use of financial resources, vice versa. The fourth A is *attention to teachers* as they are critical to the learning process by being stringent on recruitment, professional development and in-service training to have them continually being abreast with skills and knowledge. The fifth A is *attention to early childhood development* which is evidenced to have influenced increased educational success and adult productivity and the sixth A is *attention to culture,* an often neglected element, but does have importance for the improved learning of students. This edited book has covered all these elements of quality education in its reflections to various degrees.

However, Levine (2013) stressed a grim picture on the quality of education in the Pacific Islands by stating that "in many countries the quality of education has been stagnant or has declined" (p. 8). There had been increased access to an education in the Pacific Islands but the quality of education does not necessarily follow (Levine 2013). In other words, due to a global focus on increased access, there had been quantitative improvements world over but qualitative improvements can be an issue and an example this manifests itself is in children going up the school system unable to read or do math (Patrinos et al. 2014). The future of the small island states of the Pacific relies on them driving both quantitative and qualitative improvements in as many facets of their education systems as much as possible, whether it be with school leaders, the curriculum, parents, the community, or research and its importance in providing evidence for policy and practice. Just because a policy and a directive is being pushed by the United Nations, the Commonwealth, the World Bank, or other global organisations, that Pacific Island nations should espouse them as it is and uncritically. In terms of "policy transfer" (Mossberger and Wolman 2003, p. 428) or "policy borrowing" (Phillips and Ochs 2003, p. 451), Pacific Island countries (PICS) need to rationalise the effects such policy transfers from another jurisdiction. Levine (2013) stressed that in the Pacific Islands when instruments and policies are borrowed and often accompanied with external funding, contextual realities and financial sustainability may not necessarily be considered and may end up increasing the dependency that PICS have on major powers and organisations. Levine (2013) further highlighted that on a per capita basis, PICS are the highest aid recipients in the

world but there is concern that "aid to education in the Pacific is simply not effective" (p. 34). Thus, there are important reflections and conversations that the chapters to this book have to contribute to both the qualitative and quantitative improvements of education to PICS by ensuring policies and practices are relevant and contextually appropriate.

The international transfer of policies and curriculum to Pacific Island contexts can be unrealistic as countries are often under-resourced, and if it is externally funded, it is less likely to be sustainable or repeatable (Crossley 2019). Crossley (2019) states that the heavy dependence on aid by developing nations often puts them in a position they are unable to assert their ideas fully. Often, these educational policies that are driven top-down marginalize democratic voices of those down the system (Crossley 2019). Furthermore, Hoareau (2011) asserted that with globalisation, a number of policies and reforms are transferred from major organisations such as the United Nations and World Bank, and former colonial powers that would require recipients to preserve what was best with what their education systems are currently doing correctly, rather than an overhaul each time a reform occurs. These international organisations act as a global policy community who frame global policy discourses and position policy making processes away from nations (Hoareau 2011).

International policy transfer is often a main approach to educational reforms in countries. It may be initiated by a foreign donor or countries also search for existing international solutions and attempt adopting them to their local contexts. However, passive policy borrowing is not encouraged where countries have none or minimal input into the conceptualisation of the educational policy and usually comes as donor-packaged reforms. The other situation countries get into is having policy transfer that is haphazard, ill-conceived and contributes to a disconnected reform. Moreover, crucial is the absorptive capacity of recipients of policies being transferred in terms of facilities, qualified and motivated human resources, financing, and the reconceptualisation of borrowed materials need to be considered. It is salient not to take a linear and static view of policy transfer but have one that involves multiple actors from different levels including international, domestic and individual expertise (Kim 2017). Kim (2017) adds that it is vital to localise and indigenize processes of policies that are imposed or adopted from another country. Local actors have the responsibility to ensure the public understands the ideologies embedded in the policies that are being received. Lewis and West (2017) refer to policy transfer and borrowing as policy pinching and added the notion of policy learning where countries can learn from past experiences, adapt ideas to the local context, and have a deep understanding of what they are into. Policy learning has to take context on board, as without sufficient attention to this, any policy transfer should be deemed inappropriate (Lewis and West 2017).

With developing countries, if a donor is involved, policy transfer could often be imposed without consideration for context and culture (Crossley 2019). Crossley (2019) stressed that being context sensitive is critical in Small Island Developing States (SIDS) as they have their own distinct challenges and vulnerabilities. SIDS should also do more to negotiate their own aspirations from global instruments such as the Education for All (EFA), the Millennium Development Goals (MDGs) and

Sustainable Development Goals (SDGs) now, which can often be far-fetched from the realities of SIDS (Crossley 2019). Most SIDS are from the Caribbean and the Pacific and they have been recognised by the international community as having distinct social, economic and environmental vulnerabilities (Atchoarena et al. 2008). Atchoarena et al. (2008) stressed that SIDS have issues of sustainability and fragility, small economies, a high level of dependency, and in terms of education, they suggest innovations in terms of access and participation. SIDS are often seen as countries with populations below 1.5 million (Atchoana et al. 2008), which makes all Pacific Island countries considered as SIDS except for Papua New Guinea, whose population is about 8 million. Atchoarena et al. (2008) also noted that compared to other developing countries, SIDS often have levels of education that are generally higher but also underlined that many SIDS have ongoing struggles with improving quality of their education with rapid increases in enrolments, the training of teachers lags behind, and an adequate curriculum and infrastructure can be perennial issues (Atchoarena et al. 2008). Pacific Island Countries, as SIDS, face challenges stated here and these impact on the level of efficiency of the educational systems of Pacific Island nations. In terms of post-secondary education and due to smallness and scale, the University of the South Pacific is a collaboration between twelve Pacific Island states namely, Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu (Atchoarena et al. 2008).

Overview of the Book

Principals and school heads matter in issues that affect students and teachers. This book offers three chapters linked to school leadership and the importance of their preparation and the necessary skills required to govern the school effectively. In any educational context, there are multiple layers of leadership and their combined effort can make a huge difference in school improvement and development. At the school level, for example, classroom, teachers take on a range of leadership roles such as building good relationship with students and their parents. However, at the school level, school heads are required by the education ministry to lead and manage all dimensions of work. In light of this, studies presented here focus mostly on school heads ability to demonstrate a high standard of performance to lead and manage.

Most successful organisations are driven by a shared vision rather than by plans (Limerick et al. 2002). Crowther (2010), however, has stressed that a shared vision alone cannot guarantee enhanced practice as this additionally requires effective leadership, planning and capacity-building to be successful. In any case, Cuttance et al. (2003) emphasise that shared vision and core ideology define the enduring character of an organisation, no matter how much the world has changed. Quality organisations are driven by their vision and not by their rules and regulations (ibid). This chapters (Lingam and Lingam) and 2 (Lingam, Dayal and Lingam) argue for school leaders who are not only visionary, but also model the way and enable others to act. The implications of this are profound as there is a difference between being driven by

a vision rather than by rules and regulations, just as there is similarly a difference between being committed to a common vision rather than to an organisation itself (Limerick et al. 2002). Too often, schools and educational institutions are preoccupied by compliance to regulations rather than the vision. Leaders often short-change their schools by asking people to show commitment to the organisation rather than a commitment to the vision. Vision should be the core dream of the institution, which if in place would provide a clear sense of direction and a focused effort.

Chapter 3 (Wairiu) advocates that parents are an important partner in the educational process with whom the schools need effective communication regarding their children's progress, about the manner in which funds are used and possible expertise that could be utilised. Strategic alliances must be built tactfully and among them include relationships with parents and the wider community of which the school is a part. This book emphasises the importance of forging sound partnerships that the school must properly nurture. According to Crowther (2010), schools that have mutual and interacting partners have a collaborative advantage. This provides a synergy, achieved by the institution through pooling resources and expertise with other entities. It helps the organisation to diversify its opportunities in order to vigorously pursue its identified vision (Vangen and Huxham 2006). Inherently, partners have different aspirations and needs, which means that managing the collaborations is a pivotal part of the process if one is to understand the complexities and to allow collective achievements. In collaborations with parents and the school community, schools may need to deal with misunderstanding, disagreement and complaints and be able to garner positive outcomes for students. Thus, Limerick et al. (2002) state that schools need to establish a feedback loop that would continually inform the identity, culture and configuration of the organisation. There needs to be effective information flow internally, externally, among alliances and on school managerial reflections. Limerick et al. (ibid) further reiterate that without good communication, there can be no organisation. The postmodern era will inexorably require the concerted intelligence of all stakeholders and partners, who are ready for discontinuity, the future and change (ibid). It is the task of the school leader to establish an effective communication network and process. Chapter 3 highlights the importance of communicating effectively with parents and being financially transparent so that the school receives respect and trust from the school community.

The *Pacific Plan for Strengthening Regional Cooperation and Integration* is based on the notion of regionalism (Pacific Islands Forum Secretariat 2007); thus, Pacific Islands' children are expected to be more than active citizens nationally and globally, but also be active citizens regionally. This edited book has two chapters on citizenship education which are important inclusions as Pacific Islands' children need to continually be active citizens who are socially engaged with society. Chapters 4 (Fito'o and Dorovolomo) and 5 (Dorovolomo and Fito'o) deal with perceptions of student teachers on citizenship education and on the idea of incorporating citizenship into the formal curriculum. This is imperative as students need to be exposed to a curriculum that prepares learners to operate in a society that is fast-changing. This means having school cultures that are rigorous enough to respond to societal change. MacLean (2006) argues that the formal curriculum is a viable vehicle for active citizenship but

lies on the ability to insert it into the formal curriculum and its delivery. A curriculum that has active citizenship as an underpinning paradigm when it is developed can help provide authentic teaching experiences. It is vital, therefore, to connect the classroom to society and the world as well as bringing society and the world to the classroom. Utilising methodologies that promote active citizenship such as service learning, intercultural exchange and educating graduate engaged citizens who are not only learning but also taking actions on societal needs are imperative (MacLean 2006). Scheerens (2011) commented that the school is a micro-cosmos of society, where the formal, non-formal and informal curriculum can be used to promote active citizenship. Non-formal elements of citizenship could involve extra-curricular activities such as projects, visits, school exchanges, clubs, voluntary work and campaigns. The informal curriculum refers to the hidden curriculum such as peer learning and leisure experiences (ibid). Saukelo (2017) stated that Pacific Island countries such as Federated States of Micronesia, Kiribati, Nauru, Palau, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu, are working on strengthening human rights, civic education and social citizenship components of their national curriculum, arguing that these could be built into the current curricula and be made suitable for local contexts.

Sustainable Development Goal (SDG) 4 on quality education makes specific mention of the importance of minimum proficiencies in literacy and numeracy for school children, many of whom drop out after primary education (United Nations Economic and Social Council 2017). The PILNA mentioned above, which in 2015 was administered in 13 countries over about 700 schools to 45,000 year 4 and 6 students, revealed particular improvements in numeracy and a smaller improvement in literacy (Solo et al. 2016). A finding of note from the 2015 PILNA was that girls performed better than boys in literacy and numeracy (ibid).

Against this global and regional backdrop, Chap. 6 (Dayal and Lingam) addresses numeracy issues and the manner in which they are taught as well as the beliefs behind the practices which teachers espouse. Overtly, addressing the learning needs of students is imperative to better tackling literacy and numeracy at school. In the Fiji context, Dayal (2013) found that teachers were mostly confident to teach mathematics and liked the manner in which the curriculum is structured, and that while there are students who do well in the subject, there are also those who struggle, often because mathematics is preconceived as being a hard subject and students consequently lacked basic mathematical skills. Dayal also found that teachers do realise that if they slowed down, weaker students may be able to catch up, but with impending examinations, quicker coverage of the syllabi meant many are left behind. Thus, in the Pacific Islands, Furuto (2014) emphasises that the manner in which mathematics is taught is important, and that one which takes into consideration children's sociocultural background and contexts is essential. Moreover, imperative is pedagogy that recognises that there exist achievement gaps among students due to location, socio-economic status and ethnicity. Furuto suggests teaching of mathematics that is culturally congruent and encompasses real-word applications in a positive classroom environment.

Pacific Island countries have worked to equalise long-standing gaps in education, such as that between the genders. Efforts to this end have resulted in instances where girls are now outperforming boys in some areas. Academic performance between the genders will never be identical, but as long as the disparity is not significantly large, as has been the case historically, such a move towards greater gender parity reflects the situation which in which Pacific Island countries want to see themselves. Matsumoto and Meleisia (2015) reported that in the Pacific Islands, depending on country and context, outcomes favour boys in some instances and girls in others.

Chapter 7 (Dorovolomo) in this collection looks at gender in another realm, that of recess play at Fiji primary schools. The chapter takes the positions that gender is actively constructed by parents, the school, society and the child, and that school recess is one of many avenues in which children create their social world. Gender shapes play as well as being shaped by children during school recess (Boyle et al. 2003). We know from previous studies that recess can be a period where bullying, unnecessary aggression, and anti-social behaviour might occur, but it is also a space for recreation and physical activity and learning social skills. As such, Brink et al. (2010) emphasised the need to consider school recess as a learning landscape and put thought in the manner in which school yards are designed so that they facilitate opportunities for play and healthy social interaction among school children. In this volume, Dorovolomo's study of Gender Differences in Recess Play adds to these debates by presenting findings from a study of five Primary Schools in Fiji. This chapter is crucial as schools do need to recognise the importance of recess breaks as a learning space outside of the classroom. It is a space timetabled in Fiji schools that does not cost anything but can have benefits for children that should not be underestimated. It is observed that on the grounds of Fiji schools, there are frequent notices such as "do not run here", "do not climb" a tree nearby, or signage that discourages play during recess. While these may be important for occupational health and safety purposes, if overly done it stifles opportunity for children to play and be creative. Most schools in Fiji, however, do allow free play during recess and this is commended as it recognises that the recess period is an achievement setting and contributes to the child's development.

Meanwhile, the classroom is a fragile ecosystem in which all facets of a school's operations has to be taken into account (Thomas 2002). An imbalance somewhere can have profound effects on student learning. For instance, the use of teaching styles that stimulate cognition and implementation of school-based strategies to address literacy issues, which otherwise can be an impediment at all levels of education, can have positive effect on student learning. In an increasingly turbulent environment, consciously inserting citizenship education and critical self-reflection, as suggested in Chap. 8 (Varani), would be valuable inclusions to any curriculum. Even recess time and breaks in the school day provide environments that cannot be underestimated as potent informal learning spaces. Thus, as Smyth (2012) argues it is imperative that schools peel back the layers and uncover those deeply ingrained impediments to actual change in order to bring about change and improvement to the quality classrooms practice. Smyth stresses that "public schools around the world have been hijacked and deformed beyond recognition by the forces of economy over

the past three decades" (2012, p. 9). This is why socially just schools are critical, in an environment bombarded by standard-based rhetoric, market and accountability-driven forces. Important are education systems and schools that seek to bridge social distances and create conditions that would enable improved life chances of all children. Disadvantage is socially constructed (Smyth 2012); thus, it is integral that in the Pacific Islands, countries continually pinpoint sources of forces that have created current conditions, in order to understand how these forces work and how they could be confronted and transformed.

Chapter 9 (Dorovolomo and Dakuidreketi) turns our attention to the need for collaborative efforts in disciplined research. As Fox and Mohapatra (2007) stress, one significant predictor of publication productivity of academics is working collaboratively with others. Other factors include having multiple current research projects, conducive organisational policies and practices, and early success in publications. Cruz et al. (2006) reinforce that there is a relationship between research productivity and collaboration, as productive researchers often have more authors than being alone. Moreover, Greene (2007) states that in fact there is a decrease in the number of the lone author and an increase in co-authorship and multi-disciplinary research. Thus, Aggarwal et al. (2006) highlight the importance of forging networks and utilising each researcher's expertise to increase publication productivity. In analysing a Pacific Islands educational journal, Dorovolomo and Dakuidreketi present in Chap. 9 that most papers are single authored and while that is still acceptable, increasing collaboration, inter-disciplinary projects and co-authorship should be encouraged.

The SPC (2018) studied literacy and numeracy among nearly 40,000 class 4 and 6 pupils within 15 Pacific Island countries and states (PICS) and found that there has been growth in both literacy and numeracy among the children compared to its similar large-scale study in 2015. This is promising and many innovative ideas need to be employed to enhance Pacific Island children's numeracy, which Chap. 10 (Totaram, Raghuwaiya, Chief and Jokhan) emphasises. There is potential to innovate within both literacy and numeracy, and technology is an area where this can be manifested.

At the regional level, through the Pacific Regional Educational Framework (PacREF), Early Childhood Care and Education (ECCE) has become one of its central regional foci (Pacific Island Forum Secretariat [PIFS], 2018) as highlighted in Chap. 11 (Fito'o). PIFS is a Pacific regional organisation with 18 countries as members. Ministers of Education in these countries call for and endorse the PacREF to be the regional instrument in education. Thus, having ECCE singled out as an important component in the PacREF is an indication of importance of this level of education. As such, Fitoo's chapter on ECCE makes a timely and valuable contribution to the conversations on ECCE, at both the national policy and practitioner levels of the delivery of ECCE in the region in accordance with PacREF ideals.

This edited book concludes with two chapters (12, Dorovolomo and 13, Lingam and Lingam) that highlight the potentialities of school–community collaboration. The communities which schools serve possess their own challenges, whether these be remoteness, low socio-economic status with associated challenges of access to schools, high truancy, high school dropout rates, or high teacher turnover, to name a few. Ameliorating factors that impede improved teacher performance and

student learning would require the school and school leadership to design and implement innovative school projects including collaborating with the community. Many schools could mobilise community resources to support student learning more than they do at the moment. School–parent–community partnerships should be utilised to plan milestones together to meet contextualised school needs. Consequently, it is envisaged that positive school–community relations have direct impact on classroom instruction and student learning. Specifically, as examples, these could range from material resources, financial assistance towards projects, the local business that is willing to help with a building, provision of guest speakers, community service projects for pupils, and a myriad of other activities that can be planned together. A constructive and sustainable relationship between the school and the community is imperative and paints a positive outlook and image of the school to society and vice versa. As Gorinski (2005) stressed in her study of school–community collaborations in the Pacific, sustainability can be a challenge, but deliberate school–community collaborations do have positive impacts on student learning as well as promoting increased parental involvement. This brings beneficial outcomes for all stakeholders, and various barriers can be identified to consider for further collaborations (Gorinski 2005).

In conclusion, covered in this edited volume are a variety of pertinent issues that have direct implications to the quality of student learning such as the notion of citizenship, teaching styles and improvement of pedagogy, the importance of teacher self-reflection, and the contribution of recess play for school children. Ideas proposed by this book have the potential to foster more positive school environments. Sheras and Bradshaw (2016) stress the substantial influence schools have on students' development through proximal factors such as teachers and the curriculum as well as indirect impacts from school policies. Policies and programmes should not be established for the sake of creating one, but to serve a clear purpose towards improving student learning. This is so, as certain policies and programmes can actually increase teacher and student stress rather than exude positive impacts (ibid). Policies and programmes around numeracy, school leadership, diversity, curriculum development, research or even a recess policy that would ensure children have their rights to play and be free from bullying, can emanate from ideas in this book. Moreover, factors that affect a positive school environment go beyond simply the classroom, and this book emphasises cordial relationships with parents and the school community. This is important as students need to know that they are supported within and outside of the school gates. It benefits students to know there are adults and significant others who care about their learning and advancement. All these contribute to what is known as the school climate, which is referred to as "the atmosphere, culture, resources, and social networks of a school" (Collie et al. 2011, p. 1035). Crucial matters discussed in this book all have a contribution to make to a positive school climate and organisational health such as school leadership and teacher collegiality, relationships among members of the wider school community, openly discussing instructional and curriculum issues, and managing change at the school.

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Chapter 2
Teachers' Perspectives on Leadership Model in Practice: The Case of Niuean School Leaders

Govinda Ishwar Lingam and Narsamma Lingam

Abstract The Small Island Developing States of the Pacific are experiencing a plethora of educational reform initiatives which poses tremendous challenges to their education systems. Effective implementation and management of educational reforms require school leaders to demonstrate effective leadership practices. Using the Leadership Practices Inventory (LPI) which (Kouzes and Posner, Leadership practices inventory, Wiley, San Francisco, CA, Kouzes and Posner, Leadership practices inventory, Wiley, San Francisco, CA, 2013) developed to examine leadership practices of school leaders, this preliminary study elicits teachers' perspectives of their school leaders' practices in Niuean schools. Participants were teachers of the two schools in Niue, and analysis of the data relied on two basic statistical descriptors, the mean and the standard deviation. The results show strengths in the LPI's area called 'encouraging the heart'. Meanwhile, leadership dimensions needing attention and development include the LPI areas of 'modelling the way', 'challenging the process', 'inspiring a shared vision', and 'enabling others to act'. Implications of these results are applicable to other developing contexts within and beyond the Pacific region for leadership preparation and development and to improve leadership practices, which is an essential ingredient in school improvement and effectiveness.

Keywords Leadership model · Transformational leadership · Educational reform · Leadership development · Pacific islands

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Introduction

In contemporary times, there has been immense pressure for improvement in all aspects of school work. Notable among these is the area of student learning outcomes, which has a bearing on school performance. A critical ingredient in achieving success in school performance is quality leadership (Day et al. 2011; Hallinger and Heck 1996; Kouzes and Posner 2013; Leithwood and Jantzi 2008; Leithwood et al. 2004; Robinson et al. 2009; Ryan 2006). These scholars and educators appear to be unanimous in their emphasis that leaders need to engage in best leadership practices to ensure schools achieve desired goals. In this regard, school leaders' leadership behaviours and their consequent day-to-day practices are of critical importance. Investigation of leadership practices in all contexts, and particularly in developing contexts such as of those in the Small Island Developing States (SIDS) of the Pacific, is more than justified. In light of this, the current study focuses on leadership practices of school leaders in one of the SIDS of the Pacific, namely Niue.

Leads from the Literature

Leadership Preparation

According to Kouzes and Posner, leadership is a skill that anyone can learn; indeed, they aver that leadership is not inherent in the official position but rather is 'a collection of practices and behaviours regardless of the profession', (Kouzes and Posner 1997, p. 5). Based on more than two decades of extensive research on the skills, behaviours, abilities and practices of effective leaders across many professions around the world, Kouzes and Posner (2007) have identified five dimensions of effective leadership practices. This is illustrated in Fig. 2.1.

Kouzes and Posner's (2004) study on exemplary leadership experiences found that leaders who engaged in these five dimensions of exemplary leadership were able to accomplish a lot for their schools. These exemplary practices are advocated as a result of extensive research efforts on contemporary leadership practices that numerous researchers, scholars and educators have now recognised as truly representative of best leadership practices (Taylor et al. 2007). School leaders can use Kouzes and Posner's leadership model to develop their basic leadership skills in each of five dimensions: modelling the way, inspiring a shared vision, challenging the process, enabling others to act and encouraging the heart. Leadership development in these dimensions would pave the way forward in good-quality leadership practices, leading to school improvement and development. In the sections that follow, each of the five dimensions is discussed in an effort to provide better insights about how the leadership behaviours which Kouzes and Posner have identified in their model can help improve schools.

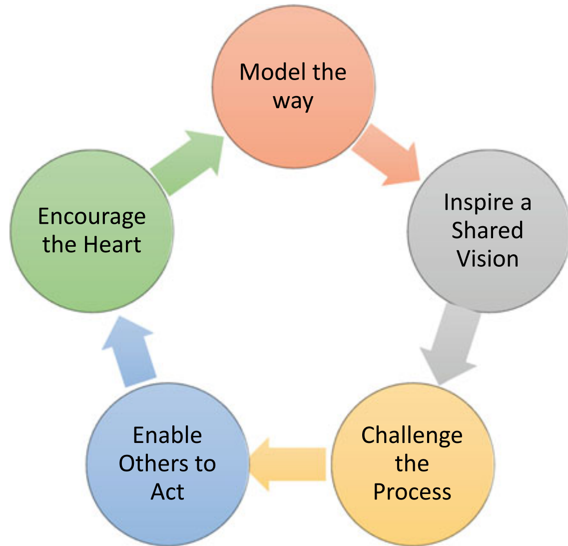

Fig. 2.1 Kouzes and Posner's leadership model. *Source* Adapted from Kouzes and Posner (2007)

Inspiring a Shared Vision

As stated: 'A good vision is a prod that—if it is really powerful—creates a pull. It attracts commitment and energises people, creates meaning in workers' lives, establishes a standard of excellence, and creates a bridge between present and future', (Espejo et al. 1996, p. 12). This rests with the leader in how he or she creates a vision and energises others. According to Kouzes and Posner (2007), inspiring a shared vision is the ability of the leader to focus on the future and clearly articulate the vision, thereby gaining the followers' support and belief in the vision. Metaphorically, where a leader wants the followers to 'travel together' in accomplishing a desired goal, he or she, as leader, is undertaking a quest that is focused on attaining that vision. One of the goals of leaders is to clarify and change the values and beliefs to obtain maximal support from the followers for the success of the organisation.

In relation to schools, principals must provide through the vision an environment that promotes quality of education that can be achieved by having a pleasant school culture. Successful principals create a vision for their schools based on their personal and professional values (Bush and Glover 2003). They articulate this vision by precept and example—through the walk and the talk, in more colloquial parlance—and influence their staff and other stakeholders to share the vision. In this way, the whole school is geared towards the achievement of this shared vision. Effective school leaders envision their future and at the same time encourage others in the school to envision where they want to be in the future. As Kouzes and Posner phrase it, 'envisioning the future is a process that begins with passion, feeling, concern, or an inspiration that something is worth doing', (2002, p. 124). Likewise, Deal and Peterson (2007) mention that school principals must be visionary leaders and

develop the capacities for their staff and students to live up to the vision for the future. Visionary leaders have the ability to communicate the goals and aspirations of the school effectively. The ability to communicate the vision is important for any school leader, but possessing competent communication skills is vital for school leaders because the success of the vision invariably depends on how well it is communicated to the staff, students and other partners in education. Effective leaders reflect on the past and plan for the future by attending to the details of the little things that happen around them. Therefore, school principals must be data-driven. This is particularly important for the schools where smart goals can be set based on past and present data. In order to achieve this, school leaders need to cultivate healthy relationships and partnerships with the wider school community to achieve the desired outcomes. One of the key factors of success for any organisation is the leader's ability to foster a culture of collaboration and team work, which is the crux inspiring a shared vision.

Encouraging the Heart

Encouraging the heart involves 'supporting individuals and groups to achieve the vision', (Kouzes and Posner 2007, p. 248). Recognising accomplishments involves focusing on the organisation's shared vision and goals and the efforts made in accomplishing them. Effective leaders acknowledge the efforts of their constituents and celebrate any achievements. Recognising the efforts and contributions teachers make in schools allows them to feel capable and motivated to try innovative ways of achieving the shared goals. On this account, Hargreaves (2003) conducted a qualitative study on emotions concerning teaching and educational change in Ontario, Canada. Through conducting interviews with 53 secondary school teachers, he concluded that teachers need acknowledgement to boost and motivate them in their professional work. While teachers in all locales need appreciation, it is all the more necessary in difficult contexts. Hargreaves's work reveals that teachers in secondary schools are highly emotional, and given the circumstances prevalent in schools, the emotional demands on teachers may be higher now than ever before. This provides all the more reason for valuing and rewarding their efforts in making innovative contributions that improve the standard of schools. While rewarding any small successes is important in improving organisations, successful leaders of turnaround schools keep their staff focused on the long-term goals (Duke 2004). Recognising the impact of positive feedback on teachers, Whitaker et al. state that 'positive staff morale is essential for any school to be the best it can be', (2000, p. 225). In essence, teachers need such 'carrots' as positive feedback, rewards and small celebrations that can enhance their teaching and learning experiences. The impact on the provision of education of an improved and sustainable quality is far more likely to be positive.

Challenging the Process

According to Kouzes and Posner (2007), searching for opportunities to change the status quo is the first step towards challenging the process and making a positive difference. Effective leaders view challenge as an opportunity to learn rather than as a threat (Kouzes and Posner 2001). By recognising the need to change, effective school leaders always look for ways for their individual staff to change, grow and improve in order to get things done. School leaders take the initiative to encourage others 'to search for opportunities to innovate, grow and improve', (Kouzes and Posner 2008, p. 2) in order to raise both staff and student performance. Even though in every experimental process, failures are likely, nevertheless leaders should take some calculated risks. In order to succeed, leaders should not perceive failure as a misfortune. Rather, they need to learn from their mistakes, so that a setback offers school leaders an opportunity to grow professionally.

Likewise, school leaders of necessity must take responsibility for their mistakes, realising that every mistake opens the door to a new opportunity. Effective school leaders should be willing to accept criticisms and suggestions and to learn from their mistakes. These leaders challenge the process by experimenting with innovative systems and taking risks to bring about meaningful change. Realising that experimenting with new ideas can lead to failure, effective leaders use mistakes as an opportunity to develop themselves. Effective leaders show willingness to change the status quo by either generating new ideas or recognising and supporting new approaches. As such, school leaders are in a unique position to challenge the core business of schools and motivate teachers to create new approaches to learning and teaching to suit new educational reform movements such as inclusive education. In this way, school leaders build confidence in their staff and encourage everyone in the school community to view problems as opportunities to learn.

Enabling Others to Act

Enabling others to act is described as a means of fostering collaboration through teamwork and individual accountability. Research indicates that 'leadership is not a solo act, it is a team effort', (Kouzes and Posner 2007, p. 224). Effective leaders actively facilitate team work to reach their desired destination. Because good leaders do not accomplish their goals alone, it is necessary to build a team that feels capable of taking action in achieving the shared goal of the organisation. In all settings, school leaders need to be the driving force to inspire the teachers and the school community to accomplish the objectives of the school. Effective leaders support and develop the leadership potential of others if they are to succeed in achieving the desired goals. However, empowering people to act like leaders themselves requires an investment in their personal development. School leaders can also develop their interpersonal

relationships by collaborating with the wider community in order to sustain good working relationships within the team.

Paradoxically, the ideal way to sustain a good working relationship and a powerful learning community is to distribute the leadership responsibilities. By distributing resources and responsibilities, school leaders build their staff members' self-confidence. Leadership is thus a shared responsibility and is potentially more effective in distributing leadership than leading by the individual leader. Also, leaders need to work closely with their staff and community in making things happen. In doing so, they create an atmosphere where both staff and the community members feel they are important and valued.

Modelling the Way

The most important role of school leaders during this era of continuous bombardment of educational reforms is to be good role models. Effective leaders take the opportunity, through setting good examples, to show others what they are doing. They set the tone through their everyday actions that 'demonstrate that they are deeply committed to their beliefs', (Kouzes and Posner 2008, p. 2). Effective leaders work towards the goal of changing learning and teaching behaviours in the pursuit of achieving excellence. However, leaders need followers and effective leaders work with followers to create 'a shared sense of purpose and direction', (Leithwood and Riehl 2003, p. 3).

It has been found that one of the keys within successful turnaround schools in the USA has been how the leaders model the way. In a comprehensive case study of 15 USA schools, focusing on significant dimensions in their practice, Duke (2004) identified that success of turnaround schools was likely to be associated with principals who model good teaching practices while simultaneously mentoring their teachers. This is a particularly pertinent finding for school leaders in Small Island Developing States, who are often called upon to perform dual roles such as of teaching and leading. In the area of learning and teaching, school leaders' performance as good role models for learning and teaching can act as a motivational tool not only for their staff but also for the students. Overall, Kouzes and Posner sum up, 'modelling the way is essentially about earning the right and the respect to lead through direct involvement and action. People first follow the person, then the plan', (2002, p. 15). Most of the leadership development programmes designed for school principals are based on studies and models that were developed in advanced countries. In the absence of a valid instrument designed to measure school leadership behaviours in the Pacific, this study adopted a model known as the Leadership Practice Inventory (LPI) developed by Kouzes and Posner (2013). According to Kouzes and Posner, the LPI model is universal and applicable to any context. This model has been used in this study because Western education is adopted in the Pacific. Also, the applicability of this model in the Pacific context has been drawn from its universal acceptance and effectiveness in both Western and non-Western contexts. The model is now recognised by

academics and scholars as truly representative of best leadership practices (Taylor et al. 2007).

What emerges from the literature on Kouzes and Posner's (2007) leadership model is that effective school leaders are engaged in leadership behaviours that are based on the five major leadership dimensions. The application of these behaviours collectively can help improve and develop schools. As Kouzes and Posner state succinctly, leadership is about '… a set of skills. And any skills can be strengthened, honed, and enhanced if we have the proper motivation and desire, along with practice and feedback, role models and coaching', (1995, p. 323). Thus, leaders can be developed so that they can engage in appropriate behaviours at all times and in this way contributing to success in all areas of the school.

Context of the Study

Niue, located north east of New Zealand, enjoys a unique constitutional arrangement with that neighbouring country in that they share common citizenship and a single currency. Irrespective of the challenges in defining 'small states', Niue, being a single island with a population of possibly 1200, seems to fall unambiguously into the category of small state (Bacchus 2008). Yet using population numbers to define small states poses some difficulty where common citizenship does result in constant change in the size of the resident population of the smaller partner, over and above the difficulty of establishing what population numbers should be definitive of 'small' states (Bacchus 2008). New Zealand Niueans far outnumber Niue-resident Niueans, yet all identify as Niueans.

Niue is a raised atoll with a land area of about 260 square km. Overall, it has very limited natural resources. Its low-level income accounts for considerable difficulties in providing funds to support improvements in educational services. On the basis of the constitutional arrangement with New Zealand, the New Zealand Government through NZAID offers educational support programmes. On Niue, there are only two schools: one is primary and includes early childhood, the other is a high school. At the time of the research in 2014, the primary and secondary schools had about 200 and 174 students, respectively. Teaching staff comprised of 20 in the primary and 22 in the secondary schools. Like other countries in the Pacific, Niue depends heavily on development partners for most development work, not only in education but also in other sectors of the economy. The limited economic resources make it almost impossible for the government to provide the range and quality of educational services to the global standard expected.

Aim of the Study

The purpose of this study was to ascertain the extent to which Niuean school leaders demonstrate Kouzes and Posner's (2013) leadership behaviours as measured by the Leadership Practice Inventory. The principal research question, which helped guide the study, is as follows: To what extent do Niuean school teachers perceive their school leaders to be practising leadership behaviours as outlined in the Leadership Practices Inventory (Kouzes and Posner 2013)?

Significance of the Study

In contemporary times, schools in most contexts (especially those in the small island states of the Pacific) have been swamped with wave after wave of educational reform which can be seen to be globally expected, regionally enforced and/or locally politically driven. Without effective leadership at the school level, however, most of these exogenous reforms are likely to fail. In this light, the current study on leadership practices is timely, as it helps to determine the status of school leadership in one of the small island states of the Pacific. On the basis of its findings, certain interventions could be introduced, such as workshops and seminars to help improve and contextualise leadership practices in matters relating to educational development and the provision of an improved quality of schooling.

Since no empirical research has been carried out in the Pacific region specifically using Kouzes and Posner's leadership model, this study is merely a starting point for research in the region; the schools in Niue have been the first for exploration. Also, the paucity of studies in the area of school leadership in developing contexts such as in the small island states (Bolanle 2013; Timirizi 2002) may stimulate the generation of more interest in further local and international research on leadership issues in the Pacific. As well as providing valuable insights into current practices and issues in the Pacific region, the findings can help inform educational policies and practices to address educational leadership development, with a view to strengthening leadership practices at the school level. As well as providing valuable insights into current practices and issues in the Pacific region, the findings can help inform educational policies and practices to address educational leadership development, with a view to strengthening leadership practices at the school level.

Research Design

This was a preliminary investigation on leadership issues in a small isolated island state in the Pacific. Because of a limited timeframe available for conducting the study, a quantitative research methodology was considered suitable. Thus, the questionnaire

Table 2.1 Leadership practices inventory

Leadership dimension	Behavioural statements
Modelling the way	1, 6, 11, 16, 21 and 26
Inspiring a shared vision	2, 7, 12, 17, 22, and 27
Challenging the process	3, 8, 13, 18, 23, and 28
Enabling others to act	4, 9, 14, 19, 24 and 29
Encouraging the heart	5, 10, 15, 20, 25 and 30

developed by Kouzes and Posner (2013) was employed to measure perceptions of school leaders' behaviour. In terms of data analysis, two of the most common statistical techniques were employed, namely means and standard deviations, to determine the degree to which Niuean school leaders engage in leadership practices as illustrated in Kouzes and Posner's (2013) leadership model.

The questionnaire consisted of 30 statements associated with leadership behaviours and the teachers were asked to respond to each statement using a ten-point likert-scale: 1 = almost never; 2 = rarely; 3 = seldom; 4 = once in a while; 5 = occasionally; 6 = sometimes; 7 = fairly often; 8 = usually; 9 = very frequently; 10 = almost always. In total, there were six statements for each major leadership dimension: modelling the way; inspiring a shared vision; challenging the process; enabling others to act; and encouraging the heart. The statements representing each leadership dimension are indicated in Table 2.1.

The participants were briefed on the purpose of the study and how the findings could assist the education ministry. The teachers were informed that they could withdraw from participating in the study at any time. The ethical conduct of this study followed the procedures and guidelines of doing qualitative research (Maykut and Morehouse 1994). Confidentiality of the details of the participants was ensured; that is, as had been explained to the participants who volunteered to take part in the study, the data were treated in a way that protected the confidentiality and anonymity of the participants (Bogdan and Biklen 2007). The lead researcher distributed the questionnaire and gave participants ample time to complete it after critically reflecting on the leadership behaviours of their school leaders. The questionnaire was administered in May 2014. Since the lead researcher was on the island for a few days only, arrangements were made with the teachers to give the completed questionnaires to the Director of Education. These were scanned and sent over to the researchers in Fiji, who were based at the University of the South Pacific's main campus, namely Laucala Campus.

Sample

The sample of teachers in the study was from the two schools (100%) in Niue: one primary and one secondary school. A total of 17 teachers (38%) participated in the study, 12 of them female and five male, most of them above 40 years of age. Most

Table 2.2 Results of leadership practices inventory scale

Dimension	Means	Standard deviation
Challenging the process	4.2	0.66
Inspiring a shared vision	4.0	0.44
Enabling others to act	5.0	0.63
Modelling the way	4.5	0.56
Encouraging the heart	6.1	0.45

of these teachers had either a Bachelor's degree or a Diploma in Teaching and the majority had over 10 years of teaching experience at either the primary or secondary school level. All were classroom teachers, and none held any administrative position in the school.

Results

As indicated earlier, the study addresses the degree to which teachers in Niue perceive their school leaders as engaging in Kouzes and Posner's (2013) leadership behaviours. Table 2.2 presents the results.

With reference to the means of the five leadership dimensions (Table 2.2), encouraging the heart (6.1 = sometimes) was ranked the highest when compared with all other means. This is followed by enabling others to act (5.0 = occasionally), modelling the way (4.3 = once in a while) and challenging the process (4.2 = once in a while). Inspiring a shared vision (4.0 = once in a while) had the lowest mean. In terms of variability of scores, challenging the process (sd = 0.66) and enabling others to act (sd = 0.63) leadership dimensions are slightly greater than the other dimensions. The results show that out of the five leadership dimensions, teachers rated only one as sometimes, rating the remaining four between once in a while and occasionally. Overall, this result illustrates that teachers perceived that their school leaders did not engage much in the leadership behaviours as outlined in Kouzes and Posner's (2013) Leadership Practices Inventory.

Discussion

This study is about Niuean teachers' perception of the extent to which their school leaders practise Kouzes and Posner's (2007) leadership behaviours. For the five broad dimensions of the leadership, all with the exception of the 'encouraging the heart' dimension received unfavourable ratings. The findings therefore illustrate that the leadership practices as spelled out in the model are least applied by the Niuean school leaders. Since the model illustrates effective leadership practices, the findings are disturbing, as the school leaders appear to have failed to exhibit those essential

practices that could have made a positive impact on the schools to achieve better results. Indeed, the worrisome situation depicted by the collected data implies that leadership behaviours other than those in the Kouzes and Posner inventory have been of little value to school effectiveness and improvement. However, it is worth noting that the findings presented here are not dissimilar to study findings in other developing contexts, as in Jordan (Abu-Tineh et al. 2009; Al-Khalaileh 2008) and Thailand (Oumthanom 2001). The most striking aspect of this research is that 'encouraging the heart' also received a favourable rating in a study conducted with factory managers in the four Pacific Rim countries (Kouzes and Posner 2001).

A contributing factor in the Niuean school leaders' modest practice of most of the dimensions of leadership could be the lack of knowledge and skills on varying leadership issues, including Kouzes and Posner's leadership model itself. This may be the case not only in Niue but across most of the Small Island Developing States of the Pacific, a result of limited opportunities for professional training in educational leadership and management (Lingam and Lingam 2014). Abu-Tineh and his colleagues in the Jordanian study (2009) advanced a similar suggestion about the school leaders' limited knowledge and experience with the model as well as in other leadership issues. Only recently, in some of the small island states of the Pacific—notably, Solomon Islands, Tonga and Fiji—has recognition dawned that leadership in schools really does matter; as a result, funding support from donor agencies is providing some training to school leaders (Lingam and Lingam 2014).

Each one of the other four leadership domains—'inspiring a shared vision', 'challenging the process', 'enabling others to act' and 'modelling the way'—yielded means of less than 5 (Table 2.2). The literature on inspiring a shared vision, for example, suggests that those leaders who emphasise inspiring a shared vision can contribute a great deal to improvement and development in schools. The low mean in this study is a worrying sign that should concern all who have a vested interest in education and would like to see improvements and developments on all fronts of the school organisation (Espejo et al. 1996). Without a shared vision, it is difficult to bring people together as all partners in education hold different visions and go in different directions (Appelbaum and Goransson 1997). The generally low mean for the shared vision suggests that more attention should be placed on developing leaders' skills in relation to inspiring a shared vision, the dimension that the literature finds is essential for bringing people in any enterprise together to foster a commitment to a shared future they seek to create. Inspiring a shared vision encourages a sense of collective ownership, which flows on to commitment to the goal of improved educational provision (Strachan 1996).

Likewise, 'challenging the process' did not receive a favourable rating (Table 2.2). As suggested in the literature, by 'challenging the process', school leaders can find new ways of doing things and improve all aspects of the school, not least students' performance levels (Kouzes and Posner 2008). The low mean implies that the school leaders were basically satisfied with the way things were done and did not initiate a challenge to any of the processes put in place. As with 'inspiring a shared vision', development of school leaders' skills in 'challenging the process' is essential. The low mean returned for 'enabling others to act' (Table 2.2) indicates

that the school leaders controlled the running of the school single handedly, with little sharing of leadership practices that used to be referred to as delegation (Kouzes and Posner 2007). The literature, however, is emphatic that leadership is not a solo act; it should be shared. When it is, much more can be accomplished, and this needs to be encouraged. In the 'modelling the way' dimension, the low mean (Table 2.2) signifies that the school leaders fail to exhibit good role models for the benefit of their teachers and students. As leaders, they need to model good practices in all areas of teaching and learning, leading by example so that the staff can follow them and become more productive.

With reference to 'encouraging the heart', the teachers perceived their school leaders as engaging better than the rest of the dimensions (Table 2.2). In this era of manifold education reforms, the increasingly challenging work of teachers warrants greater exhibition of school leadership behaviour that demonstrates encouraging of the heart dimension of effective practice. Nevertheless, despite its importance in changing times, this dimension of leadership on its own may not be able to contribute enough to succeed in making things happen in schools. School leaders must consistently exhibit an optimum level in all dimensions of effective leadership behaviours (Kouzes and Posner 2013).

Conclusion

This study investigated the extent to which Kouzes and Posner's (2013) categories of leadership behaviour were practised by school leaders as perceived by their teachers in Niue. Although the questionnaires were completed by a small number of teachers overall (numerical smallness arises from situational smallness), teachers were unanimous in their perception that their school leaders under-performed in all leadership dimensions except 'encouraging the heart'. The conclusion is inescapable that school leaders need to improve in the other four dimensions of effective leadership: 'challenging the process', 'modelling the way', 'inspiring a shared vision', and 'enabling others to act'. This would help them to respond better to the demands of educational reforms. Otherwise, such lacunae in leadership practices are likely to negatively affect school effectiveness and improvement. Since Kouzes and Posner's (2007) Leadership Practices Inventory has been recognised by many researchers, educators and scholars world-wide, it would be professionally sound if such a model were to be emphasised and at the same time given more attention in all future leadership and management training programmes in the small island states of the Pacific. Having better knowledge and skills in leadership practices will certainly help school leaders in leading and managing school organisations.

Given the importance of leadership, it is essential that further research in this important area be conducted in other small island states to determine the gaps in the knowledge and skills, as a basis for making informed decisions about addressing them. Also, future inquiry using Kouzes and Posner's (2013) Leadership Practices Inventory could explore the correlation between leadership practices and student

achievement. Embarking on such studies would yield useful information about the potential or lack of it in transforming leadership practices. Also, feedback from such a study would provide further insights about future training programmes, especially the content of the leadership and management training programme to help school leaders cope better with the ever-changing demands of work.

Though this was a small-scale study and solely based on quantitative research design, comparable countries (other Small Island Developing States in the Pacific region and beyond) may find this study on Niue school leaders' practices useful and relevant.

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Chapter 3
School Leadership Development for Managing Educational Change: The Case of School Improvement Planning

Govinda Ishwar Lingam, Hem Chand Dayal, and Narsamma Lingam

Abstract One of the notable educational changes in the Republic of Marshall Islands (RMI) has been the education ministry's requirement that all schools undertake a process of school improvement planning. This pilot study explores perceptions of a sample of RMI teachers regarding the way this exercise has been undertaken in their schools. The results indicate that school heads' limited grounding in school improvement planning hampers this valuable undertaking. The processes which schools adopted were incongruent with those suggested in the literature as best planning practices and principles. This calls for more education and training to ensure that school heads are better prepared to lead in effective planning for school improvement. Specifically, what is needed are ways of widening the opportunities for all who have a vested interest in education, especially those at the grassroots level, to contribute to the planning process. Implications of the study are likely to be relevant to other developing jurisdictions within and beyond the Pacific region, in order to ensure better preparation for school heads to embrace and benefit from reforms that stem from elsewhere.

Keywords Marshall islands · Educational planning · Strategic planning · Improvement planning · Leadership development

Introduction

In their efforts to modernise and transform their education systems, most of the Pacific Island countries are involved in various educational reforms such as in the school curriculum, assessment, teacher performance, parental engagement and teacher and principal recruitment procedures. For example, in Fiji, teaching contracts have been introduced for teachers and principals. In contemporary times, manifold changes are occurring in the education systems of the Small Island Developing States of

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the Pacific. In the last decade, some of the education systems of these countries have moved towards the introduction of planning for educational development at the school level. School improvement planning and school development planning are examples of strategic planning. Despite the terminological differences, the principles and practices involved are basically the same. Educational planning at all levels is worth undertaking for the progress of education systems. In fact, all education institutions or systems should undertake educational planning in all seriousness in order to cope effectively with the maelstrom of demands and rising expectations of various stakeholders in contemporary times (Chang 2008; Fernandez 2011; Ralph 2010; Shapiro 2001; Teasdale and Puamau 2005).

Ishumi's seemingly playful conundrum aptly captures the essence of planning: 'Everybody plans to succeed but many people fail to plan', (1984, p. 7). School improvement planning, or any other form of planning, is important, particularly for education systems in developing contexts, where progress towards improvement in the provision of an acceptable equality of quality education in all parts of a country, especially in rural areas, is a continuous and relentless struggle (Ishumi 1984; Teasdale 2005). Given the significance of planning in meeting varying demands and contributing to school effectiveness and improvement, the preliminary investigation reported here explores teachers' perceptions of school improvement planning in the Republic of Marshall Islands (RMI), a small island state in the Micronesian area of the Pacific. The fundamental research question guiding the study was: What are the teachers' perceptions of school improvement planning carried out by the school leaders?

Theoretical Framework

Fullan (2007) proposed a comprehensive framework for conceptualising change within education systems. The framework involves an interaction among three broad categories of factors emanating from characteristics of change (need, clarity, complexity, quality/practicality), local characteristics (district, community, principal, teacher) and external factors (government and other agencies). Within the whole context of education in any jurisdiction, the lack of consideration of the interplay of these factors can lead to complexities that can adversely affect the implementation of any change reform agenda. Since an education system is connected in multi-faceted and complex ways to the wider social environment in the nation in which it operates, understanding the ecology of the setting is also necessary for the success of any planned change in education (Levin 2001). The idea of plucking reforms from one system and exporting them to another is not advisable as all systems are different in many ways (Brauckmann and Pashiardis 2012; Segedin and Levin 2012). Thus, transplanting reforms to other nations and unquestioningly implementing them in ways that are insensitive to the receiving ecology, such as not being culturally specific, can lead to failure of the reform initiative.

A notable consideration to make in any change initiative includes attentiveness to local characteristics, such as school leaders and teachers, who play an important part in the process of implementing any change mandated by the employer. If school leaders in particular are not well versed with change processes or theories, then this will adversely affect its implementation. This demonstrates that school leaders need to have a bank of knowledge relating to the change in order to effectively implement it at the school level.

The inevitability of change in education demands that education systems strategise well in order to respond effectively to various changes happening within and outside the system. However, an interplay of key imperatives—notable among them being the characteristics of change, the local characteristics and the external factors—makes it challenging to implement changes. The influences of multiple factors simultaneously, or even individually, complicate the effective implementation of any change. In particular, the potential of any change may not be fully realised if human resource is not adequately developed. For instance, at the school level apart from classroom practitioners, capacity building of school leaders warrants attention for successful implementation of any change.

Leads From the Literature

The literature analysed here concentrates on three key aspects. The first provides some background information about what educational planning is and its importance in educational development at the school level. The second explores consultation and participation, two key concepts that could, when applied to the educational planning process, bring about better gains for everyone, and more so to the school population and the community the school serves. The final aspect briefly considers the importance of professional preparation of school heads as the essential basis for the successful implementation of any educational change.

Educational Planning and Its Importance

Coombs (1970, p. 14) defined educational planning as ‘the application of rational, systematic analysis to the process of educational development with the aim of making education more effective and efficient in responding to the needs and goals of its students and society’.

Later, Ishumi defined it as:

> A process of preparing decisions for future actions in the field of education, decisions that take cognizance of prevailing policy, in an earnest attempt at arriving at informed decisions designed to enhance an integrated and equitable development and distribution of educational opportunities and life chances. (1984, p. 11).

Both definitions are comprehensive, and they share a strong concern with considering the essential elements in the process of educational planning so that the plan—by working towards the development of the education system—works towards the development of the nation as a whole. Such undertakings are particularly important within developing nations' development activities.

Some level of planning, though often taken for granted, is in fact vital for individuals and communities as well as for nations. For any nation to improve all facets of its economy, including education, planning is of paramount importance. Careful planning is based on the belief that it promises enhanced success for all who plan. Apart from individuals, all nations, whether small or large, must plan in order to expedite the development of various sectors of the economy, not least the education system, being the key sector that has the potential for significant contribution to improvement in all other sectors. As far back as the 1980s, Ishumi (1984, p. 8) was already enjoining caution with reference to developmental experiences in a number of developing countries and highlighting the fact that planning 'is a stage no country or institution can afford to by-pass without risk of omissions or oversights in effect, and for the poorer third world countries, it is an absolute necessity which must always begin at the highest national level'. The significance of planning for development encompasses the need for careful planning in education at all levels. As suggested in the literature, planning should not be restricted to the national level; it must also occur at the school level, for here is the locus for the planned changes to be more efficient and effective and at the same time more responsive to contemporary demands (Bell 2002; Shapiro 2001; Teasdale 2005).

Planning at the School Level

Strategic planning is inexorably becoming an integral part of education, especially in some of the Small Island Developing States of the Pacific. The concept of strategic planning has become a well-established buzzword in the business world, with sufficient success stories to its credit to be legitimately applied within the fiddle of education and other sectors of the economy as well—what some refer to as the business model of human life (McNamara 2003). Advocates urge that through a strategic planning process, schools could focus more sharply on their choice of goals, objectives and strategies for accomplishing those goals, helping to move the institution in an appropriate direction (David 2005; Bell 2002). In the case of Fiji, this approach is nationally known as school strategic planning and was formally introduced in 2009 via the Ministry of Education (Lingam, Lingam and Raghuwaiya, 2014). A critical component of school strategic planning is its laying out of priority areas that fall into four broad categories determined by the education ministry: learning and teaching; community partnership; leadership and management; and infrastructure development (ibid). Within these categories, individual schools determine the specific areas on which they will concentrate for improvement. For each of the priority areas, the goals and objectives are articulated, providing the reference points against which

the performance of the plan can later be ascertained. Strategies for achieving these goals and objectives are specified and performance indicators spelled out. In addition, resources, timeframe and people responsible for various activities are assigned.

Participatory and Consultative Approaches

School improvement planning offers an opportunity for grassroots level engagement of stakeholders through consultation and participation in the planning process. However, in the Pacific, as in many jurisdictions, local participation in education planning exercises has not been a part of organisational culture (Randolph 2006). Generally, a centralised and elitist approach has been the tradition, with responsibility for construction of the plan falling to a select few, especially of people higher in authority and social standing, a veritable elect elite, a pattern falling readily into place with the traditional conceptions and structures of authority and power in many Pacific societies. Even the ground-breaking Karmel Committee national report on *Schools in Australia* (1973) urged a devolution of responsibility, equity, diversity and choice in schooling—and beyond these, the need for community involvement (Burke 1992). The report stressed what was at its time a rather novel idea that a grassroots approach to the control of a school's operation is vital to improving the school's effectiveness.

In fact, salient literature that underlies the field of educational planning demonstrates that consultation and participation with relevant partners in education is an important part of the School Improvement Planning (SIP) exercise (Birley 1972; Conway 1978; Ginsberg 1997; Learner 1999; Puamau 2005; Teasdale 2005; Tokai 2005a). This would encourage a strong commitment to bottom-up rather than top-down processes and a recognition that active participation of all education partners is vital in the planning process (Teasdale 2005; Tokai 2005a). In the 1970s, one author was already forcefully asserting the need to involve within the planning decisions everyone concerned with the education service, '… one of the preconditions of planning for education is that everyone engaged in the service, professionally or voluntarily should be involved in its planning', (Birley 1972, p. 8). Such an inclusive process is likely to yield better outcomes for schools and children who are the immediate beneficiaries of any educational plan. This will then contribute towards the principle of plan ownership, helping raise the stakeholders' level of commitment to effective implementation of the plan. Reporting on the situation in the Pacific, Puamau (2005) points out that in most cases, failure to consult relevant stakeholders in the planning process is a serious limitation.

This point bears repetition: that inadequate involvement of relevant stakeholders is likely to discourage them from any sense of plan ownership, which could then adversely affect implementation. Puamau (2005, p. 32) observes that 'participation in and ownership of the planning process are important for the success of strategic plan implementation'. Tokai (2005a, p. 50) likewise opines that consultation, 'is

highly important, as the recognition of [all stakeholders] and the valuing of their contributions ensures that they will have a strong sense of ownership of the plan, particularly important when they are the ones who will be involved with its implementation'. He indicates 'the plan's success is dependent upon the actions of key stakeholders … They are more likely to support and contribute to its implementation if they are involved with planning from the earliest stages and believe it will have a positive impact on the organisation', (p. 22). Betit (2004) has categorised the benefits of a participatory approach to planning (PAP) into three aspects: simplicity of the process involved; decentralisation of control; and its reliance on synthesis and inclusion to create vision. In short, PAP empowers stakeholders and emphasises bottom-up ideas by involving every interested stakeholder in the process (Betit 2004; Rambiyana and Kok 2002). In view of the benefits to be achieved, school leaders should take note of the suggestions advanced by different scholars when undertaking various components of the educational planning process.

Leadership Development for Planning

For every stage of the planning process to occur successfully, leadership is a critical factor (Teasdale 2005). Particularly, leadership and management are at the core, running through every phase of the entire planning process and duration of the plan. With effective leadership, a pleasant atmosphere can be created wherein all stakeholders contribute to the plan formulation and share in the decision-making. There is 'no substitute for the vision, the dynamism, or the energy of the executive who can translate the right strategy into collaborative action', (Stringer and Uchenick 1986, p. 10). Contrariwise, ineffective leadership is likely to have an adverse effect on not only stakeholder collaboration but also the overall performance of the plan. Already in some educational contexts, such as that in Fiji, school leaders' major challenge is the ability to engage the community, especially in the educational planning process (Lingam et al. 2014). With strong and effective leadership, communities can come to feel at ease and also interested to contribute wholeheartedly to the planning process (Donaldson 2001). If for no other reason, heads should, in the interests of effective and efficient school planning, foster the active participation of all relevant stakeholders at whatever level.

It is wise to consider Kaufman and Herman's suggestion that those intending to undertake strategic planning in education should be well versed in what it entails, otherwise:

> Strategic planning [can be] in danger of becoming just an educational fad … [S]ome educators have borrowed a page from the industrialists' book and embrace it – often without a clear idea of what it is, what it should deliver, and how it differs from other types of planning. (1991, p. xiii).

As a starting point, some of the basic questions that need to be posed and addressed in strategic planning include: Where are we going? Where do we want to be? How

do we get there? How will we know when we have arrived? (Bryson and Alston 1996; Tokai 2005b). Although these questions may appear simple, they are no less problematic for those who lack adequate professional preparation in educational planning.

In a 2014 study, Lingam and colleagues demonstrated the difficulties which school heads in the Fijian context were encountering in attempting satisfactory strategic planning. Here, it became clear that significant prior training of educational leaders at all levels is called for. At the school level, in most of the Pacific Island countries, school leaders are not adequately competent in managing and leading their schools (Sanga 2005). As central figures in the planning process, they are required to lead and manage it (Bell 2002). Hayward (2008) highlights that the challenges of the strategic planning process are particularly apparent in contexts where it has not previously been a part of professional work at the school level. More frequently, planning in education is something conducted at the headquarters of the education ministry and then passed down to the lower echelons of the education hierarchy for execution. In fact, education in the Pacific is still very much a manifestation of education systems of the colonial powers (Puamau 2006). Much has changed in the education systems of metropolitan countries, yet the Small Island Developing States in the Pacific still cling to most of the structures and processes of education common during the colonial era (Puamau 2006).

Significance of the Study

The literature analysed alludes to waves of reforms introduced in the first decade of the twenty-first century in most education systems in the Pacific region and notable among them is the requirement for schools to undertake strategic planning for their development. In effect, little empirical research has been done so far, since the introduction of this thrust, to determine what progress school leaders and teachers are making with their schools' strategic planning. Lingam and colleagues' (2014) small-scale research appears to be the only relevant sample available. It is useful both to evaluate the planning process and to determine the effectiveness of this school planning initiative in other contexts in the Pacific region, before fine-tuning it, if necessary, as it is expected to offer direct and indirect benefits for children's education.

In this light, the present research is significant, since the findings can help inform the principal stakeholder—the education ministry- about difficulties relating to the application of the reform with a view to strengthening it. Additionally, research is needed to inform practice, and in this case, to bring about improvement and development in schools in order to provide the best possible education for its children. The current study has local and international significance, if only to act as a catalyst for further empirical research on issues pertaining to the effectiveness of other reforms introduced in education.

The Study Context

Educational provision in the context of RMI faces many challenges. The central office of the education ministry formulates policies and undertakes planning for a country of very diverse schools and unique environments in which to implement educational praxes. There exist three types of schools categorised by their location: those in Majuro; those on Kwajalein; and those in the outer islands. Within this last category are two 'sub-centres', Wotje and Jaluit, each of which has access to electricity and the internet, hosts a boarding high school, and enjoys fairly frequent transportation links with other islands. However, much of the attention is focused on the first two categories, which are considered 'urban'. Since the central office of the education ministry is based on Majuro, the capital of RMI, the education officials are able to monitor schools there effectively. Similarly, the Kwajalein schools are relatively easily monitored.

The outer islands, however, are a collection of small, far-flung schools with limited access to resources and support. They are subject to the same planning as urban schools despite being situated in a very different environment facing a very different reality. Generally, outer island elementary schools cater for students in grades K–8, and they are typically small, with student population sizes averaging about 70, though many schools have fewer than 30 and a few have more than 100. Even though student-to-teacher ratios are small, teachers in these schools are responsible for teaching multiple grades at the same time.

The schools in the outer islands have limited access to resources. Despite the effort in recent years to install solar panels, most schools on the outer islands still lack power. The continued reliance on sunshine to illuminate classrooms can be problematic on rainy days, even to the point of providing reason to cancel school. Furthermore, the teachers and principals at these schools travel by boat or plane to Majuro for the summer, returning just in time for their schools to open. They are often on their own for the rest of the year, with limited or no access to support or school materials. Indeed, 'the far and isolated schools often operate independently, almost in a stand-alone existence, with little support from and communication with the MOE [Ministry of Education]', (Joseph 2010, p. 7).

The MOE's best efforts to visit these schools are often thwarted by limited financial and transportation resources and other logistical problems. Moreover, when ministry staff do visit, they are often there for only a week, providing inadequate time to follow up on all areas in which schools need support. For example, a training visit to an isolated school or atoll rarely allows enough time to conduct the training *and* to observe teachers and provide feedback. They may meet with a school community and realise the problems the school is facing, but have limited means for addressing needs in an effective and efficient way. As a result, school support is not equitable, and these remote schools are, in effect, marginalised. In such circumstances, school leaders play a crucial role at the school level to ensure improvement in all aspects of the school organisation.

Methodology

This study was designed to collect data from a representative sample of RMI teachers, who, in the nature of the country's geography, were scattered throughout the islands. For ease of administration in these conditions, a questionnaire was chosen as the most appropriate and effective instrument for data collection. An added virtue was the intention to construct a questionnaire that encouraged teachers to explore and express their views freely (Creswell 2011).

The questionnaire was similar to the one employed in the 2014 Fiji study. The two-part survey invited teachers' reflections on SIP processes already undertaken in their schools. In the first part, teachers were to rate a group of given statements, indicating their level of agreement or disagreement on a four-point Likert scale ranging from one (the lowest agreement) to four (the strongest agreement). These items were drawn up from the best practices in the educational planning literature and also on the basis of the first author's work experience in teaching a postgraduate course on educational planning. Additionally, the education ministry document on SIP had been consulted to determine the ministry's general aims and objectives. The data thus collected helped to assess the effectiveness of the SIP process. The second part of the survey provided the teachers with ample opportunity to express their views on what they expect to see in future SIP in light of their earlier experience.

Following research ethics protocol, the teachers consented to willing participation in the study. They were assured that the data collected was only for the purpose of the research, and that their confidentiality and anonymity would be fully protected (Bogdan and Biklen 2007). They could refuse to participate at any point during the research and could refuse to answer any question with which they were uncomfortable. Most of the Marshallese teachers ($N = 23$) agreed to participate in the study and the return rate of the completed questionnaire was 70%. All participants had been teaching for over a decade.

In terms of analysis of the quantitative data, common descriptive statistical techniques were used such as means and standard deviations. On the other hand, qualitative data were analysed on the basis of themes that emerged from the responses (Bogdan and Biklen 2007; Creswell 2012).

Findings

In this section, the analysis of the quantitative data is presented first, followed by the qualitative data. The summary of the quantitative data is presented in Table 3.1.

The summary of the quantitative data (Table 3.1) illustrates that six of the fifteen statements are rated at or above the mean of 2.5. Though these ratings are positive, they are barely above the mean. Rather surprisingly, the highest rating (2.7) was awarded for the suitability of the meeting times. Of the ratings for the other nine statements falling below the mean, the lowest is for collaborative planning (1.9);

Table 3.1 Summary of the responses from the participants ($N = 23$)

Statements	Mean	Standard Deviation (SD)
The school leader was well versed in what a school improvement plan entails	2.4	0.41
Community participation was encouraged	2.1	0.23
All my colleagues participated in the planning process	2.5[a]	0.44
I took an active part in the planning process	2.4	0.22
Planning was carried out collaboratively	1.9	0.20
Through consensus and compromises we arrived at the final product: the plan	2.0	0.51
Everyone was treated equally in the planning process	2.4	0.53
There was effective communication with all stakeholders	2.5[a]	0.43
The planning was conducted in a pleasant atmosphere	2.6[a]	0.56
The school management demonstrated commitment to the planning exercise	2.6[a]	0.40
The time for meetings was suitable to all	2.7[a]	0.42
My school's improvement plan is a realistic one	2.5[a]	0.51
All stakeholders are satisfied with the plan	2.0	0.32
All that we have planned has been implemented	2.0	0.30
The plan is based on high-quality data after SWOT analysis was carried out	2.0	0.42

Note[a] = at or above the mean

four others rate only at 2.0 (consensus and compromises on the final document; stakeholder satisfaction with the plan; plan implementation completed; and SWOT analysis.

The analysis of the qualitative suggestions from the teachers for future SIP produced results indicative of an overwhelming support for more capacity building (90%), followed by encouraging stakeholders' participation in the planning process (88%), and undertaking proper situational analysis (85%). Though this pilot study did not allow for more thorough probing, these opinions, if considered as 'fodder' for action research feedback, are quite encouraging. Some of the typical comments accompanying the teachers' experience in SIP included: 'Not only principals but we all teachers need training on school improvement planning'; and 'more training is needed before we can properly carry out school improvement planning'. These responses recognise a need for up-skilling of teachers and school heads so that they acquire relevant knowledge and skills to carry out this important activity more successfully.

Almost all teachers commented on the need to encourage all stakeholders to become involved in the planning process. One teacher noted that 'planning is to be done collaboratively so that all school needs are addressed and met. In future, all stakeholders should be allowed to participate'. Other typical comments about

the idea of the participatory approach to planning included, for example: ‘The non-involvement of all stakeholders in the planning process is not good … all should be part of the planning process’; ‘lack of parental and community involvement’; ‘lack of collaboration between teachers and administrative staff’; ‘everyone listening to each other and working together … respect for parents and guardians although they may lack education. Their views are very important’, and ‘have all parents and the community get involved’. Such sentiments about encouraging a participatory approach to planning were repeated among almost all the teachers who participated in the study.

Another important area that became evident for consideration in future SIP exercises is proper situational analysis. Comments included, for example, ‘the plan should have included maintenance of the leaking roof … we should try to carry out proper situational analysis’; ‘teachers do not have their own space for doing all the preparation and this should be considered in the plan … we should collect relevant data and then plan’; ‘the library must take priority over anything else as students’ reading ability is poor and yet nothing is done;’ and ‘classrooms are really hot for students to learn … very important for improving children’s performance’. These typical comments illustrate the lack of relevant skills to carry out situational analysis, and as a result, areas may not have been properly prioritised for planning.

Discussion of the Findings

The purpose of the study was to garner from the RMI teachers some insights into the SIP practices in their respective school settings. With reference to the quantitative data, most of the mean scores obtained are not significantly above the mean of 2.5 (Table 3.1). This makes it clear the necessity for more emphasis on all aspects of SIP, because the quantitative responses are not demonstrating the development of a well-grounded appreciation of the considerable benefits of a well thought out SIP. Likewise, the qualitative responses suggest the lack of requisite knowledge and skills in undertaking SIP. The analyses of both data sets demonstrate a low level of effectiveness and a less than reassuring level of commitment to the principles of best practices in planning. With the constant search for ways to modernise and improve the provision of equality in the system-wide upliftment of educational quality through reforms, it is essential that implementers, and in this case, school leaders have the ability to manage change. SIP in RMI, like school strategic planning in Fiji, has been a top-down, ministry-driven reform. Schools are required to furnish their plans to the education ministry; however, this should not be construed as the reason for the production of the plan. Too many of the stakeholders seem, as yet unaware of the importance for them, as the planners and beneficiaries, of SIP in their schools (Lingam et al. 2014). In terms of educational reforms, perhaps the basic flaw is the apparent dearth of school leaders’ capability to function inspirationally at the forefront of the individual schools’ SIP projects and knowledgeable enough to lead and orchestrate the stakeholders and implement the plan effectively.

In fact, the analysis of the responses demonstrates the near total agreement on the under-preparation of school leaders in the theory and practice of effective SIP. More professional development is needed to ensure school leaders are knowledgeable and at the same time have the capacity to undertake the process of SIP (Bell 2002; Kaufman and Herman 1991; Lingam et al. 2014; Pallotta and Lingam 2012; Tokai 2005b). Since SIP is an innovation, more education and training is vital for school heads to grasp its complexity. At present, the lack of training is doubtless a contributing factor in the low performance of the school heads, because they appear to have little knowledge and skills about SIP. If this is the case, the final product, the plan, runs the risk of becoming just another educational fad, a document not really serving the purpose of the school (Kaufman and Herman 1991).

In terms of *best practice* in educational planning, we contend that SIP should not be a unilateral endeavour spearheaded by a few select people such as school heads, but rather a collective undertaking by all who have a vested interest in children's education. The teachers' voices, together with the community voices, for example, must be heard. Marginalising some teachers and community members from the SIP exercise could trigger a lack of support from them during plan implementation. If the teachers are able to participate at minimum in the decisions which directly affect them, they are more likely to feel some sense of satisfaction that they too have some input and ownership not only in the document, but also the process and the changes themselves. Participation in planning decisions, helping staff and significant others feel invested and satisfied as partners, would surely motivate them to contribute positively towards achieving whatever is planned.

However, the data illustrate a lack of collaboration with stakeholders, whereas best practice would encourage more collaboration with relevant stakeholders on SIP (Bell 2002; Fernandez 2011; Puamau 2005; Tokai 2005a). This is vital in terms of plan ownership and at the same time in implementation of the plan (Teasdale 2005). In particular, encouraging community involvement—say, of parents and various interest groups—would pave the way for combined efforts towards educational improvements. Since SIP is a legitimate aspect of school management, school heads should grab the opportunity to enlist community involvement successfully (Burke 1992; Puamau 2006; Teasdale and Puamau 2005).

In contemporary times, parents are becoming better informed about various educational matters. In this regard, they present a potential resource in decision-making, particularly in areas that are not strictly educational but affect the school's work in some way, such as infrastructure development. Through the involvement of relevant stakeholders, their demands, opinions, expectations and reactions, as well as their knowledge and experience, relating to any of the aspects, can be considered and planned for, provided they are given opportunities for participation. Without their support, schools may face difficulties in making any significant progress in some or all areas (Shapiro 2001; Teasdale 2005). Through a participatory approach, local communities can be empowered to take action and facilitate educational change at the grassroots level. Since school improvement planning hopes to involve grassroots participation, rather than participation spearheaded by people in higher authority or officials who are far-removed from the classroom and the school context, it is highly

desirable to engage local stakeholders in determining SIP, always remembering, of course, that introducing a reform is one thing, but seeing its practical implementation is yet another.

SIP is considered a sound way to plan for educational development at the school level. However, without adequate consultation with and participation of relevant stakeholders in the planning process, little can be achieved. The introduction of school improvement planning gives an opportunity for grassroots participation in educational planning, which hitherto has been conspicuous by its absence. Based on the feedback, from both quantitative and qualitative data sets, it can be concluded that the teachers generally agree that the SIP process needs more attention.

Leadership lies at the heart of the school organisation, and with quality leadership, the school effectiveness and improvement are enhanced. Unless there is effective leadership development, improvement in all areas of work will be adversely affected including SIP. Since the feedback from the teachers indicated that the remedy to this is more training, it appears the school heads are still unclear about the work involved in the different aspects of SIP. They appear to be having difficulties understanding the change. Despite the inclusive model, school leaders may lack the skill of mobilising the communities to take ownership of their schools and planning in areas they can contribute towards qualitative improvement in education. Without capacity building of school leaders, managing and coping with any change will continue to be challenging. While it appears that the school leaders may lack leadership capacity or motivation for coping with SIP, to neglect this is not an appropriate or viable solution. The need for quality school leaders at the school level is obvious. Since the school heads act as a lynch pin between the education ministry and the local community, they must develop the capacity to take this or any change on board effectively. Mentoring and training of school heads would ensure they are better prepared to manage change such as the introduction of SIP or any other planned educational change and development. Of course, introducing an educational change is one thing, and to see its practical implementation at the school level is yet another. The stock of knowledge on SIP among the school heads has appeared in the analysis of both sets of data as a regrettable failure to apply other best practices of educational planning as well. For now, it can be considered as at best only moderately effective.

Conclusion

School leadership development is the key driver for successfully managing any change at the school level and to ensure maximum benefit to the school organisation and, in turn, to all partners in education. The study reported here, though small in scale, illustrates the need for more education and training of school leaders to ensure effective application of the best practices in SIP for the long-term benefit of the school, the community served by the school and the nation. Even though most of the principles of educational planning were present, they were seen to be functioning at relatively low levels, and school leaders may have done better if they had the

required knowledge and skills. This would have enabled them to effectively apply the principles of educational planning.

In view of the findings, it is useful to consider Fullan's (2007) theoretical framework, particularly the local characteristics apart from the other characteristics in order to achieve any educational change successfully. In particular, capacity building of school heads is vital as it will help them to develop useful knowledge and skills to lead effectively and manage any change in ways that contribute to school improvement. Conversely, leadership practices that are not well aligned with the changes in education will very likely lead to a downward spiral of the school, with an adverse impact on all the members of the professional learning community, especially the children. To achieve desired results in educational planning requires both an ongoing awareness and better training programmes for school leaders. Through the effective application of the best practices of educational planning by the school leaders, more can be accomplished in all areas of the school for the benefit of all stakeholders and more so for the nation's children.

Although we cannot claim the findings sufficiently represent all schools, the data at least provide relevant insights of the ground realities about SIP in the operation of RMI schools. The principal stakeholders in education would do well to take heed of the findings of the study. Even though this was a small-scale study with a small number of respondents, there is still sufficient consistency in the feedback to warrant further and focused research in the area of SIP. Due to the dearth of research literature in the Pacific region, more in-depth and large-scale research is needed to create a broader knowledge base not only for educational planning but also for other educational reforms phased in the education systems. Such research endeavours could inform and influence policy and practice.

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Chapter 4
The Partnership Between School Leaders and Parents: Views of Solomon Islands Parents

Ellen Oimae Wairiu

Abstract Effective communication and the building and sustaining of a positive relationship on trust and respect are important aspects influencing the nexus between the school and the parents. It is, therefore, very important that schools create an atmosphere in which parents feel valued and respected. This study investigated the views of parents regarding the partnership between themselves and the school leaders of their children's primary schools in Solomon Islands. The research was conducted qualitatively by the use of a semi-structured interview guide to facilitate discussion with the participants. The research fieldwork was carried out in Solomon Islands with six parents from six different primary schools in Honiara city and Guadalcanal Province. The parents of this study highlighted some factors that inhibit the building of relationship and of trust between schools and the parents. These include the lack of on-going communication from schools about children's learning progress and school developments and a lack of transparency from school leaders about the use of school funds and parents' financial constraints. Parents of this study also suggested recommendations that they want to see their school leaders implement, to include sharing in decision-making, greater transparency, and effective communication between the school and parents.

Keywords Solomon islands · Community partnership · School accountability · Parental participation · Teacher absenteeism

Introduction

Relationship building between schools and parents is one of the primary roles of a school leader because it creates partnership towards the learning of the children. School leadership is a basis in developing a system that promotes parental involvement in their children's education (Mapp 2003). School leaders, in the context of this study, refer to head teachers or principals. The Solomon Islands Ministry of

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Education Human Resource Development (MEHRD) has stipulated that the school leaders are to manage, instruct, and act as change agents in schools (MEHRD 2005). Change agents, according to Marks and Printy (2003), ought to share leadership and to encourage the active collaboration of the school leader with the teachers, students, and the parents on any matters concerning the school. This study investigates the views of six Solomon Islands parents about the relationship between themselves and their school leaders. The research data was gathered using a semi-structured interview to facilitate discussions with the participants.

Literature Review

Effective school leadership ensures success for schools and the children's learning outcomes (Dorovolomo 2008) and involves achieving goals through working together with the school stakeholders (DuFour et al. 2010, as cited in Lunenburg 2010, p. 4). To achieve this cohesion, as Sanga and Walker (2005) stated, "leadership must practice the principle of accountability which means they must keep the community informed about plans, decisions and actions relating to the care and use of resources," (p. 100). When people work cooperatively on an issue, in the case of education, each will know their roles and accordingly do their part to achieve goals. The goal in this case is to work closely with parents to involve them in their children's education and the success it brings in the children's learning.

It is important to consider that effective leadership is expected from the school leaders because they are role models in the community they are serving (Sanga 2002). Hence, successful leadership, according to Dorovolomo (2008), includes nurturing friendships within communities, providing structure and venues for collaboration, and valuing the community's views and incorporating them into school programmes. Taking and valuing parents' views and incorporating them into school goals can make parents feel accepted and valued within the development of the school. However, Sanga and Houma (2004), in their study on school leadership in the Solomon Islands, found that "not all Solomon Islands principals were clear about their own roles and not all staff and board members were perceived to be clear about the principal's roles," (p. 66). Most of the principals did not have copies of the important policy documents, such as the Education Act and the Teaching Service Handbook.

To have effective leadership in schools, there is a need for continuous professional learning for the school leaders and the teachers. Findings from Malasa's (2007) research into school principals' effective leadership in secondary schools in Solomon Islands stated that a "lack of support for on-going professional learning," (p. 53) for the principals were contributing to the ineffectiveness of leadership. Interestingly, Lingam's (2011) study also revealed that prior to his school leaders training programme, some school leaders lacked time management skills and had difficulties in managing their staff. For example, "60% of the study's participants (school leaders) had no idea that they could network with the community" (p. 6). This was explained as being due to their limited knowledge and skills in leadership. As suggested by Sanga

and Houma (2004), principals need more knowledge about their roles as leaders of schools. This knowledge includes the importance of creating partnerships with the parents.

The suggestion by Sanga and Houma (2004) that principals need more knowledge about their roles links well with findings of Rouikera (2013) concerning the impact of a professional development programme on the effectiveness of school leaders in Solomon Islands:

> Professional development for head teachers needs to be continuous and more specifically, a career-long developmental process to ensure that they are able to implement, sustain, and enhance their learning, as well as address the various changes that occur with the passage of time such as acquiring and developing new knowledge and skills. (p. 93)

Therefore, on-going professional learning is important, and the research literature suggests an urgent need for school leaders in Solomon Islands to improve and enrich their leadership capacity (Ruqebatu 2008).

School leaders must recognise that parents play a vital role in the school improvement process. As Dorovolomo's (2008) case study is found, the school principal's successful relationships and engagement with his surrounding communities included providing the structure and venue for collaboration, improving student learning and achievement as central to collaborative activities, incorporating community and parental views, and instilling ownership and nurturing relationships. In order to involve the parents and the community, venues for collaboration need to be provided. There must be constant meaningful dialogue with parents, and their views must be included in school planning in order to build stronger feelings of ownership in the school (Sergiovanni 2000). Therefore, to strive for school improvement, it is important that school leaders be creative in engaging the parents and the community.

Building and Sustaining Positive Relationships

Building and sustaining positive relationships with parents and the communities are another important role of the school leader. Parents can be willing to participate in school development when the leadership practises transparency. School leaders are the role models in a school community. This can build trust between parents and the school leaders.

In order to gain more support from parents, schools need to first create the friendly and welcoming environment that can help create trust so that the parents realise the school is approachable to visit and discuss any concerns about their children's education. This suggestion is similar to Dorovolomo's (2008) study that schools need to open up to the parents and establish a personal relationship with them. Therefore, creating an approachable attitude and welcoming school environment can help build and sustain positive relationships between schools and the parents.

Methodology

This study is qualitative in nature and has used semi-structured interviews with six parents of different socio-economic backgrounds from six different primary schools. Four parents were from the urban schools, and the other two parents from a rural setting. All parents were interviewed face to face in Pidjin, the lingua franca of Solomon Islands. Selection of parents for the interviews was done by the researcher by approaching them personally. All the interviews were conducted at the venues most conveniently for the participants, where four of them were held at their work places while two were at their homes. Since this research project focused on the views of parents from various backgrounds, it was very important that they understand the nature of the research. Therefore, the researcher made sure the participants understood the nature of their involvement, participation, and they had adequate knowledge about the research project by explaining thoroughly in Pidjin. The six parents were fully informed and three of them signed their consent forms while the other three verbally gave their consent before being interviewed.

Findings and Discussions

Findings in this study indicated that relationships between schools and the parents are influenced by effective communication and the building of relationships.

Effective Communication

The study found that the communication modes used in Solomon Islands' schools include letters, notes, progress reports, and sometimes messages sent verbally to parents through their children. The schools in the rural areas used churches to pass their messages to the parents and the communities. These messages were mostly about school fundraising, school breaks, PTA meetings, children's progress reports, renovation work, and school clean-up days. However, findings indicated that passing messages verbally is not always effective, sometimes when children reach home, they have already forgotten part of the messages.

A requirement that MEHRD imposed on schools was to increase the effective communication and involvement of parents and the community within the schools (MEHRD 2006), yet this study found that communication between schools and the parents still needs improvement. There is little face to face communication between schools and parents concerning children's work progress, but the few parents who do have access to these sessions found them very helpful and useful. As Glanz (2006) argued, "face to face meetings strengthens school-family communication which can promote student achievement" (p. 17) while Timperley and Robinson (2002) also

reported that "greater parental and community involvement would improve children's achievement" (p. 63).

The study also found that some schools sent children's progress reports home after mid-term and end of year exams; however, it was revealed that not all parents understand the contents of those reports. As one parent said: "My child's class teacher always sends his school report home. The reports are about his exam results and behaviour at school. I cannot read well, but my elder children always read and explain the messages to me". Teacher–parent interview sessions regarding children's learning progress could be practised by all schools so that questions can be answered, and confusions be explained. In this way, teachers, parents, and the children all benefit from these meetings. When parents are involved in more face to face meetings, this can strengthen family–school communication and increase the possibility that parents will attend school programmes as communication creates relationship (Glanz 2006). Hence, school leaders could be innovative and organise programmes that can bring parents to school and involve them in face to face meetings.

Very few parents visit the schools voluntarily when they have issues to discuss with the school staff. This study revealed that some parents tend to only visit school when they drop off and pick up their children from school daily. Their other visits to schools were mainly when requested by the school to pay school fees, school contributions, and to attend PTA meetings, teacher–parents interviews, school clean-ups, and fundraisings. It was also found that there was limited discussion about children's learning, with this study showing that two out of the six respondent parents visited their school occasionally to confirm verbal messages and to enquire about exam results from the school. Most stated that they can visit the school if the school staffs make them aware of the importance of visiting and talking with the school staff about their children's learning.

Building and Sustaining Positive Relationships on Trust and Respect

Building and sustaining a positive relationship based on trust and respect are an aspect influencing the relationship between the school and the parents (Malasa 2007). This study showed that a key aspect was teachers' commitment or otherwise to their work as a significant influence on the relationship between the school and the parents. Parents of this study stated that some school leaders demanded they actively participate in school programmes, but school funds were misused, and this attitude had put many parents off participating. There is a lack of transparency about the use of school funds. Sanga and Walker (2005) argued that "leadership must practice the principle of accountability which means they must keep the community informed about plans, decisions and actions relating to the care and use of resources" (p. 100). Quality leadership means loyalty and commitment to the roles and responsibilities

expected from the school staff. Therefore, school leaders could practise transparent leadership to build trust from parents.

School staffs are role models in the community they are serving (Sanga 2002), however this study showed a contradicting story. Some school staffs seem to be abusing their professional role. For instance, instead of teachers showing discipline and professionalism in their work by arriving early at school and not being absent from work, some do the opposite. Findings indicated teachers' absenteeism as a major issue in Solomon Islands primary schools. All parents in this study commented highly of their school leaders' leadership, but the teachers' absenteeism issue was clearly the main concern they wanted to be addressed immediately. School leaders must be the role models in their commitment and in modelling behaviour to their staff. As one rural mother said: "The leadership of our school is good but they need to be committed to their responsibilities as leaders of the school. They frequently travel to Honiara city and can be absent for days. When they do this the other teachers sometimes just teach up to anytime they want and then send our children home".

Teachers' absenteeism is occurring in both urban and rural schools but is more prevalent in the rural setting. The findings in this study support Maebuta's (2008) survey on the impact of schools on students in the Solomon Islands that "on average teachers missed four contact periods in a week" (p. 103). However, recently the Solomon Islands Office of Auditor General (OAG) carried out an investigation into why teachers are absent from attending their classes. They found that there is widespread dissatisfaction amongst teachers with their conditions of service, especially with low salary, lack of teacher housing, and lack of professional development by MEHRD, Educational Authorities, and the school leaders (OAG 2011). Therefore, teacher absenteeism in Solomon Islands is a national issue, and the Solomon Islands Government (SIG) has a huge responsibility to improve teachers' conditions of service.

According to the parents in this study, teachers' absence from class was often not explained to them, and they were left wondering why their children were sent home early at times. As one rural parent said:

> Teachers' absenteeism from work at our school is a huge concern. A lot of times my son went to school in the mornings then not long he came back home and reported that his teacher did not turn up. When I asked him what happened, he just said the teacher is not coming today. There is no reason given to my child as to what makes the teacher not coming to school. I am usually not happy and confused but I did not know what to do. I just assume that the teacher might be sick.

This had left parents confused, and they did not know what to do, as Greenwood and Hickman (1991) argued, parents feel powerless to approach and influence the schools in such situations.

This study also found that teachers in the rural setting are often absent from their schools for one week or even two weeks. Most parents in the rural communities understood that the teachers need to travel to the urban centres to draw their salaries from banks and do their shopping. However, the question they kept asking was, why do teachers have to stay away for weeks. As one mother revealed:

> Teachers' absenteeism in our school is a huge problem. Teachers went to Honiara without us parents know about. I only learnt about my child's teacher not at school when my child came home early and reported it. I understand that the only place for teachers to get their salary and do shopping is at the capital centre which is eight hours by ship from our community. But my concern is why they have to stay for weeks and weeks before returning back to school.

When a teacher is absent from the classroom, the learning process of students becomes disrupted (Brown and Arnell 2012), and there is no continuity in students' learning progression (Rogers and Vegas 2009). Findings showed that this issue had victimised the children's right to learning because the children often stay home doing nothing when teachers are away from school. Parents were concerned that schools always demand their support, but that teachers do not value their contribution by letting their children down through being absent from teaching.

Improving Parent and School Relationships

When parents in this study were asked which improvements they would like to see in their schools, all of them identified two key areas: firstly, shared decision-making and more transparency and secondly, effective communication between school and the parents.

Shared Decision-Making and Greater Transparency

All six parents in this study acknowledged the importance of involving themselves in school planning, visions, and decision-making so that they can share their views. They would like for schools to keep updating them on the use of school funds. However, they confirmed that the reality was the opposite, and that decision-making concerning school programmes and affairs was done by the school leaders, teachers, and the school committee. There was no wider consultation with parents and the communities. It is one of the school leaders' duties to "practice the principle of accountability" (Sanga and Walker 2005, p. 100) so that parents and the community are kept informed about the happenings in the school.

Effective Communication Between School and the Parents

Effective communication from the schools can create approachable and welcoming school environments for the parents and the communities. It was revealed from this study that most schools are not welcoming for the parents, which is similar to the findings of Hornby's (2011) study on parental barriers to participation in schools. It was found that school staffs are rarely seen around school to greet and welcome parents at the school compound, as a mother said:

> The attitude of the school leaders is not welcoming for the parents to feel free to approach. I drop off my children at school every morning but I hardly see the head teacher or my children's class teachers greeting and welcoming parents at the school compound. School staff needs to be approachable so that parents can feel free to discuss any concerns they have with them.

This issue was also highlighted by Glanz (2006) in that "parents have not always been welcome partners to schools" (p. 23). Therefore, creating approachable and welcoming school environments could improve the relationship and develop partnerships between schools and parents.

Conclusion

This study aimed to capture parents' views on the relationship between themselves and the school leaders of their schools. It found that relationships between school and the parents are influenced by effective communication and the intentional building of relationships. The study found that there is lack of on-going communication from schools about school developments and the updates on the use of schools' funds. Lack of effective communication and abusing of school funds destroy the trust from the parents which leads to parents' reluctance to participate in school activities. In addition, this study found that teachers' absenteeism from teaching is an issue that parents want to see improving because it denies the rights of the children to quality education. All parents in this study suggested that they want their schools to create an atmosphere in which parents feel valued and respected. They wish for an environment where parents feel free to visit and voice their concerns or seek advice on their queries.

Based on the findings identified in the study, recommendations are included on how to improve effective communication from school leaders to parents and for school leaders to practise transparency in their planning and decision-making. School leaders need to learn more about their own role in building partnerships with the parents through effective communication and involving parents in school decision-making. The Ministry of Education and other policy-makers can develop education policies that promote effective partnerships between schools, parents, and communities. Also needed is a national policy which clearly sets out expectations for schools, teachers, and parents so that each group understands their roles and responsibilities. It is further recommended that the School of Education (SOE) of the Solomon Islands National University (SINU) considers incorporating school courses for building partnerships with parents and the communities.

On reflection, the limitations related to this study were that it was a small sample of six parents, therefore, the researcher cannot make a generalisation that all parents have the same views as the parents in this study. The researcher was unable to engage other parents from other provinces due to transport difficulties and time even though parents from other provinces and religious schools could contribute their

views. Therefore, further research on the views and expectations of parents' role and responsibilities on their children's education needs can be undertaken in other provinces in the Solomon Islands to get wider viewpoints.

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Chapter 5
Re-Visiting the Social Studies Curriculum of Solomon Islands

Billy Fito'o and Jeremy Dorovolomo

Abstract The social studies curriculum of Solomon Islands was developed in accordance with the National Education Act of 1978. Similar to many Pacific Island curricula, in the 1980s, the Solomon Islands curriculum framework was driven by the global shift in aims, goals, and content in order to address challenges which societies experienced during that period of time, particularly, those changes of behaviours linked to certain global events. This chapter shares findings about the relevance of the social studies curriculum of Solomon Islands (SI). It reports on a study conducted with teachers in two case study secondary schools in Solomon Islands using qualitative methods of group discussions and one-on-one interviews. The study revealed that the current teaching topics, themes, and approaches of the social studies curriculum are irrelevant and are outdated in its usefulness. This chapter argues for a review of the social studies curriculum to cater for knowledge, values, and skills that are relevant to the twenty-first-century Solomon Islands' society. The study also provides further conceptual insights into Solomon Islands teaching approaches and strategies that are currently relatively unexplored. These include approaches and strategies in the teaching of social studies that produces good and active citizenship.

Keywords Solomon islands · Social studies · Curriculum review · Citizenship education · Active learning

Introduction

In the history of pedagogy, globally, social studies is seen as a subject that has been part of the formal curricula from around 1897 (Heater 1999). However, before this, much of the teaching time was devoted to separate topics of history, geography, and civics. Prior to the twentieth century, what was expected were, for students, to memorise information in their textbooks and then recite them in class. However, from the late nineteenth century to the early twentieth century, there were great changes

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to the social studies curriculum and methods of instruction. A period known as the 'progression period' reformed American life through social and political movements influenced by education philosophers such as John Dewey (early 1900s) and the innovation of Parker (late 1800 s). Social studies, as a taught subject, was born during this period (Heater 1999).

The subject, which particularly focused on human behaviour, has been subjected to more pressure for change than other curricular subjects. This was 'attributed to the subject's relatedness to the rapid rate of social and technological change found evident in many societies around the world' (Heater 1999, p. 5). Since its inception as a school subject in the early twentieth century, social studies has been rocked by battles over its purpose, content, pedagogies, and the historical account of its origin as a school subject (Ross 2006).

This study explores the extent to which the Solomon Islands social studies curriculum is adequately offering knowledge, values, and skills that are relevant to students' learning for the twenty-first-century citizen of Solomon Islands. It verifies the knowledge and values of the social studies curriculum currently used with the behaviour and attitudes commonly found among youths in today's Solomon Islands.

The Literature

Social studies is a subject born from the parent disciplines of social science, the humanities, and the natural sciences (Cater, cited in Marsh 1991). It closely links with democratic ideals and is considered to be part of a general and liberal education specialising in education for effective democratic citizens. Such an explanation was viewed by others as quite narrow, although the disciplines mentioned do have important goals (Engle and Ochoa 1988). The reason for this criticism was that the contents do not expose children to meaningful contexts, but rather was viewed as simple exposition of facts and generalizations about which social scientists at a given point in time are in reasonable agreement. Such a claim positioned social studies as social science adopted and simplified for a pedagogical purpose. This view saw social studies as being simply a means of mere exposition of a relatively narrow set of facts and generalizations which were selected from social science and presented to students as truth to be committed to memory (Engle and Ochoa 1988).

While debates about content and pedagogy within social studies are ongoing, it is the combination of varying disciplines into one teaching subject that has clearly shown its integrated nature. This is a field which attempts to draw different disciplines together. The combined teaching disciplines include social science, the insights into the humanities, sociology, geography, history, and citizenship education. Such a combination is seen by some as value-laden and problematic (Hill 1994). Despite this, the subject matter of social studies is believed to help students construct the knowledge base and aptitude to live with each other harmoniously. However, some writers point out that citizenship lacks clearly defined and generally acceptable boundaries, in varying degrees (Cater cited in Marsh 1991). This is because people interpret

the combined discipline's concepts, knowledge, values, and skills of social studies according to their context and situation.

Some writers defined social studies as a critical study of the social science and history in order to engage directly with the intellectual process of students whereby social science and history become instruments in the learning process rather than the ends of education (Engle and Ochoa 1988). It is also seen as an integrated study of social science and humanities to promote civic competence for the purpose of practising problem-solving and decision-making for developing citizenship skills about critical social issues (Wesley 1978). The values underlying social studies are further expounded by Wesley (1978). He explains that the social studies taught as social science stems from a variety of events that took place in the 1960s. For instance, there was a shift from post-war patriotic rhetoric to a focus on global social justice (Mutch 2005). The aim of social studies in such a circumstance, with a social justice perspective, was to help children understand the world they were living in and to take their own place in it, and in particular, to help children to think clearly about social issues (Mutch 2005). This means that teachers acquainted students with the methods of research modes of inquiry and ways of looking at the world adopted by the social sciences.

The second tradition, as articulated by Wesley, is 'reflective inquiry', which is perceived to be:

> …a tradition which focuses on preparing students for citizenship and is regarded as the most important component of citizenship because it concerns personal choice. Students will need to identify problems and issues and make decisions on matters of policy and belief (NFER 2006 p. 19).

The third tradition in teaching social studies is 'citizenship tradition'. This tradition is viewed as the oldest tradition. The essence of the tradition is the deliberate inculcation of what is considered the most desirable knowledge values and skills assumed necessary for survival of the culture. This approach addresses the questions, 'What kind of citizens does society want? What knowledge does society recognise as worthwhile?'.

The Importance of Social Studies

The social studies curriculum is taught in many if not all formal education systems globally. It has been widely considered as an essential and appropriate approach to deliver and promote the concept and values of citizenship education (Allen and Steven 1998; Engle and Ochoa 1988; Hill 1994; Kerr 2000; Marsh 1991; Massialas and Allen 1996; Zarrillo, 2004). According to the literature (Heater 1999), its inclusion in education systems around the globe is appropriate because it has the ability to transmit knowledge and understanding about people, environment, moral values, political structures, government, and how to deal with issues and conflicts of the contemporary period. It is a subject that teaches about people to help them acquire

knowledge and master the process of learning to become active citizens (Ross 2006). In other related literature, Mutch (2005) noted that, 'Social studies is a discipline that teaches about people, women, men, and children. It teaches about how and why in diverse culture, and in different times, and places they think, feel, and act, and organise their way of life' (p. 192).

Furthermore, 'Social studies teaches about how people interact with others and their environments, initiate their responses to changes and meet their political, social, economic, legal, and spiritual needs' (New Zealand Ministry of Education, 1994. p. 7 cited by Mutch 2005). Reley and Wofford citied in Adeyemi et al. (2003), in discussing the relationship between education for citizenship and social studies, have asserted that students should be challenged to apply civic knowledge, skills, and values as they solve real problems either in school, their community, nation, or the world. The citizenship education concept seems to be the driving force behind education that will promote the values considered important for good and active citizenship (Zarrillo 2004). It is a subject that is believed to teach children to value themselves by nurturing positive self-conception and learning (Mutch 2005). It can help students adopt healthy values towards school and learning, the social and physical environment, and the political and legal propositions of the state (Zarrillo 2004). The values that need development and promotion should constitute the standard or criteria against which individual behaviour and group behaviour are judged. A set of values that social studies emphasise is civic and citizenship values and beliefs that lead to good and active citizenship.

What needs are fundamental to society and how can society meet these needs? In what ways can society select content areas that can best be transmitted to the next generation? These questions beg scrutiny and are the focus of studies such as this one in Solomon Islands.

The Purpose of Education and the Social Studies Curriculum of Solomon Islands

The purpose of schooling is very much similar in any environment. The education system of Solomon Islands has been developing the citizens of the country through a variety of ways, particularly through the teaching of various academic subjects at school. This, as in any country, is to help in creating an enabling atmosphere for the citizens to achieve the broad educational aims of the state. The overall aims of education in Solomon Islands are similar to many of the countries in the Pacific Islands. Education is defined particularly by the academic subjects taught in the formal education system. Such conceptualisation of education by people of Pacific Island Nations is narrow compared to the definition provided by Lawton cited earlier in the chapter. As stated by Thaman (citied by Manu 2009), 'current school curricula in most Pacific Islands countries are too academic and geared towards university

study, and therefore most school leavers will have learnt little that is of practical value to them in the context of their own societies' (p. 50).

However, the concepts of education and curriculum, as observed, are far from achieving its broad educational aims. The fact is that, in its current form, education in the Solomon Islands is very limited in its capacity to give students the understanding about values that will affect their behaviours in order to make a positive change to the social, political, and physical environment. It has been found that the curriculum does not enable students to gain understanding of the diversity of community and society and an awareness of equal opportunities, national identity, and cultural difference (Advisory group on citizenship 1998, p. 19 cited in Demaine 2004 p. 18).

The changes made to the social studies curriculum of Solomon Islands in the 1980s after gaining independence from Britain are similar to the new social studies curriculum promoted in Australia, Canada, England, and the USA (Herbert and Sears n.d; Print 1999). In Australia, the study of society and environment encompasses themes such as culture, place and space, resources, time, continuity and change, natural and social systems (Sander and Yulaelawati 2008). Similar themes were also adopted into the social studies syllabus of Solomon Islands. These include social relationships; people, place, and the environment; time, continuity, and change; conflict and cooperation in the modern world; people and their development; industrial and urban growth, and; continuity and changes in Solomon Islands (Ministry of Education Human Resource Development 1998). These were intended to expand students' knowledge and understanding about relationships within the family, respect for environment, events occurring in the past, what is happening in the present, and to anticipate what might happen in the future (ibid). Such expectation, however, is limited only to memorisation of events. The fact is that the framing of competencies is only on facts, concepts, and generalizations.

Reality of Social Studies Teaching in the Solomon Islands

In the current Solomon Islands social studies curriculum, it has the following stated goals: first, for students to be well informed about other countries' social, economic, political, and belief systems both past and present; second, for students to be aware of and understand the changes that occurred in the past and are currently occurring; third, for students to develop an awareness of the society's human and physical resources; fourth, to develop an understanding of the diversity of yet independent people; fifth, develop the skills and attitudes needed for them to be committed to play an active role in the life of their communities (ibid).

However, what was seen was that the content, themes, and teaching pedagogies in social studies appear not to address the current physical and social needs of Solomon Islands people. For instance, teaching about families, religions, denomination, and churches, the history of wars, the anti-government movements, and

resolving conflicts seems dogmatic and non-influential to the children's mental, physical, spiritual, and social development. The knowledge received is purely for memorisation of facts in preparation for national examinations. In the current teaching of social studies in Solomon Islands, students receive instruction about families, colonialism, government structures, wars, revolutions, and political systems. However, it is not enough to teach about what happened in the past and acknowledge what the present values ought to be. In today's reality, it is important for students to have a broader and deeper knowledge of how culture and religion developed humans and the relationship of interconnectedness of people, communities, and the states (Steward 2007). This will not be achieved by giving students mere facts about the cultures, customs, families, and historical events. Students rather need to also develop critical thinking skills and to be taught key concepts that they can apply to real-life situations.

Furthermore, according to a National Curriculum Review Committee, the current Solomon Islands social studies themes and topics have outlived their usefulness (Ministry of Education Human Resource Development 2002). Many of topics were related to the broad goals of the 1960s, 70 s, and 80 s. This can be found in the teaching of themes of government and political changes, early migrations, cold wars, and nationalist movements. Such themes are irrelevant to today's reality, providing only a large body of knowledge that does not lead itself to any critical analysis of the events and issues of contemporary concern. The teaching of social studies instead should give students an opportunity to compare and contrast the concepts rather than passively acquiring information as facts. In addition, it is vital to relate relevant prior knowledge to present learning and to recognise the social realities or what is occurring in societies today (Levine 2007).

In this case, Solomon Islands needs a coherent and properly structured social studies curriculum which prepares students for the future. The goals have to be rooted in present societal reality and based on students' own aptitude and experience. Such a claim has shown how important revising the social studies curriculum is for Solomon Islands. How can Solomon Islands develop a curriculum that is relevant and contextual to citizens? This question is addressed through the current study.

The Study

This study is qualitative and is situated within the interpretative/constructivist paradigm. The choice of such paradigm was to situate activities that can locate the researcher in the world that is interpretative regarding materials and practices that make the world more visible (Denzin and Lincoln 2008). It is also to ensure that research is placed in a natural setting where the researcher can build good relationship with people that are involved in the study in order to gain information that is rich and robust (Creswell 2003).

The study uses a case study approach. Using case studies as suggested by Yin (2003) is useful to understand a complex social phenomenon such as social studies in a developing country. Two schools were selected for the study. They are an urban

day school in Honiara, the capital city of Solomon Islands, located on Guadalcanal Island and a rural boarding school on Malaita Island. The schools were purposefully selected as they fit with the study's criteria for obtaining information rich cases that can inform the study.

In case study one, a rural school, a total of ten respondents participated. Of these, six were students (three males and three females), three were teachers (two male and one female), and one was the principal. In case two, the urban school, similar numbers and categories of respondents participated. In both schools, three male and three female students were selected and organised into one focus group. The characteristics for the selection of samples from the urban school were related to the school's mixture of students from different ethnicities and backgrounds. In Solomon Islands, there are more than 80 different languages and cultural groupings, spreading among the 900 islands that are divided into nine provinces so having different representation from different backgrounds richly informed the study.

Semi-structured and unstructured interview questions were used with participants. The semi-structured questions were used for one-on-one interviews with principals while the unstructured questions were used in group discussions with students and teachers. The group discussions and one-on-one interviews were audio recorded and are expected to generate valuable, rich data for the study. Prior to analysing of the data, the researcher transcribed the audio recording from Pijin (Solomon Islands National language) to English. The data were then regrouped and highlighted to identify emerging issues important for the study. In this preliminary analyses process, the data were organized and arranged with clear codings under relevant themes. The data were then reduced and regrouped again (Grbich 2007) under certain codes that were identified from the themes through comparisons, categorizations, interpretations, descriptions, and syntheses (Ezzy 2002).

The questions that guide the study include the conceptualisation of the social study curriculum, the extent to which the Solomon Islands social studies curriculum teach on important values, the extent to which the social studies curriculum teaches values for good and active citizens, and how might changes or improvements to the social studies curriculum can be made to include values that promote good citizenship.

Findings

The findings of this qualitative study conducted in Solomon Islands using individual and group interviews with one urban school and one rural school with students and teachers have found that the current social studies curriculum, which is a combination of many disciplines, including history, sociology, geography, anthropology, social sciences, and citizenship is already overloaded. The study found that it is impossible to adequately cover themes and appropriate values prescribed in the social studies curriculum because there are too many teaching topics and themes. The teaching of appropriate themes was covered but not so much to achieve the expected outcome as stated in the syllabus. As expressed by three different respondents:

> We teach about the environment, family relationships and community awareness but this knowledge is for different purposes. Not to develop students to become good citizens. (HUST2)

Another added:

> I have taught the concepts but I cannot fully recognize the teaching methods to achieve the aims of the topic because it has very limited time and there are too many things to cover. (HSUT 1)

Furthermore:

> What I have in mind for given topics is stirred by different objectives. My deliberate goal is for students to understand the concepts for examination purposes and not so much on what will become of students in their future. …we pick only topics that we consider appropriate from among the many topics given. (HSRT 3)

The study found that teaching useful knowledge can be achieved, but considering the time constraints, and the quantity of information that has to be covered, it is unrealistic for students, given their priority need of preparation for external assessment. Meanwhile, teaching about social realities is an important technique, especially the process of effectively relating the problems encountered within the society to the learners. The other challenges found the failure in the part of the government to emphasise social realities instead of passing exams.

According to the study, there has been no indication or reflection from students that social studies teaching or the knowledge underpinning relationship has changed people's attitudes. The experience was that good values demonstrated by students are learned and acquired from home. As pointed out in responses from teacher participants:

> If some good values are demonstrated at school or outside the school, it is not from what they learn at school. It is from what is learned from home and the knowledge and values received from the teaching of culture and Christian religion (HSRT 2);

> The values are covered but not as adequately as what the aims and goals of the syllabus expect. Much of the teaching is done on content only for what is expected to be assessed. (HSUT 1)

Concerning current teaching themes and from the receiving end, most students claimed that what they have received in the classroom is important knowledge: the learning about families, community, environment, and government. However, it was the application of the knowledge or values that is lacking, particularly, applying the knowledge outside of the classroom in real-world situations: 'We learn about social studies topic but have not applied the knowledge outside of the classroom' (HSRS 2). 'In form one I learn about the topic 'My family, our community, our nation" (HSRS 1). Another student said, 'I learned about the environment, the effects of logging on the environment in form two' (HSUS 2). Another claimed, 'I learned about the government but for me to apply the concept in real situations is what is lacking' (HSUS 5). One blamed teachers for not teaching them the values, stating, 'Maybe the teachers have failed to teach about the good values' (HSRS 6). Most students claimed that the good values they had acquired were received from home.

The urban principal's remarks indicated that the current curriculum content of social studies is not sufficient to provide students with knowledge that develops them to become good and active citizens. He preferred a change to the current content of teaching citizenship in social studies to include values of morality, virtue, respect, and identity and relational unity for a healthy living environment (HSUP).

The study also shows that the social studies subject is already overloaded and so the current themes in the social studies are barely completed by the end of the academic year. Therefore, to include other themes and concepts in social studies again would be inappropriate and value-laden. However, if social studies is to be relevant to today's situation, it has to be reviewed so that topics which are out of date can be removed to cater for new themes and values that reflect Solomon Islands' current society. This finding suggests a review of the social studies curriculum to cater for themes and topics relating to knowledge and values that will unite the people of the Solomon Islands. Currently, the social studies curriculum makes no change to students' behaviours as the knowledge learned is for examination purposes only. As claimed by one student respondent:

> The teaching of social studies that I know of does not change my behaviour. The behaviours, display at school are received from home. Teaching of social studies is not successful, because it doesn't reflected from what people demonstrated outside. (HSRS 2)

The current topics in social studies are teaching about family, community, the environment, government, and changes. The study found that knowledge and values learned from social studies do not help to develop students to recognise the importance of relationship unity and respect for the social and physical environment. That can be justified from the values displayed in the country by youths. From what has been expressed, nothing tangible emerged, among the chaotic situation in Solomon Islands. There are 'corruptions everywhere, conflicts everywhere and people are not in good term as seen' (HSUT 1).

In terms of teaching approaches, the study found much of the teaching to focus on the content which is expected to be tested in the exam only. The content includes teaching on events such as wars or conflicts, their timeline, and major historical events. Although teaching methods were provided to teach the themes relevant to capture expected value outcomes, rarely do teachers use the approaches in teaching social studies as stipulated in the syllabus. As pointed out by one teacher:

> I teach about families and community relationship in form one, environment in form two, role of leaders and government in form three. However, those are just knowledge to learn in preparation for examination. They are not there to shape students for their future. (HRST3)

It is also evident from this study that the national examinations often determine the topics that will be covered from the social studies syllabus. As another teacher expressed:

> Our traditional societies have been teaching and educating our younger folks about community structures, leadership roles, relationships, and moral values from custom for respect for one another ever since. (HUST 4)

The Way Forward

According to the findings of this study, the improvement of the social studies curriculum can occur only if the following are addressed: firstly, a review to the examination system is necessary. There are strong arguments for a change or review to the examination system, particularly to cater for a system that would also consider and accommodate the monitoring of behaviours at school. What is needed is a system that not only monitors students' academic progress but is also concerned with the behaviours of students. Importantly, both teachers and parents would have the opportunity to monitor students' progress. That would certainly keep track of students' progress academically and behaviourally.

Secondly, changes should also involve curriculum models that offer active learning. That may involve changes to curriculum pedagogies. Currently, in Solomon Islands, the most commonly used curriculum teaching pedagogies are teacher-centred; primarily the teacher talks and writes notes on the blackboard while students listen and copy the notes in their exercise books. The barrier to learning in this regard is students' passive involvement in the learning activities. However, if active learning pedagogies were employed by teachers, the values taught may have real positive implications in students' lives.

The third recommendation involves policy changes concerning the social studies curriculum to accommodate teaching and learning content, themes, and topics that are relevant and contextual to Solomon Islands. In other words, the knowledge and values reflect the social, political, cultural, and religious ethos of society. This includes moral values and societal virtues such as respect, relationship and unity, care and responsibility, and honesty and integrity. The inclusion of these contextual and cultural values in the social studies curriculum would develop students to be more respectful and have greater unity; they will acquire the moral values to be good citizens and the desire to be active citizens too.

Conclusion

It is obvious from the study that there is a need to review the social studies curriculum to eliminate content that is irrelevant and un-contextual to the current Solomon Islands society. This would provide room for the inclusion of themes, topics, and teaching values that are relevant to the twenty-first-century behaviours. Some of the useful themes, knowledge, values, skills, and activities highlighted include the citizenship values: promotion of rights was implied to have contradicted the cultural and religious values of the society. The misconception of rights which created conflicts needs to be addressed formally in order that students may correctly understand its value when they are still young. Such action can change societies in the future. Equally important are the concepts relating to duties and responsibilities, national identity, social cohesion, and the themes of moral values and social virtues. As a country with

diverse cultures, language, and ethnicities, teaching on themes that comprise such knowledge, values, and skills is significant for the stability of the nation as a whole.

Further, the study implies a need to change the examination system, to avoid the overtly, abstract transmitting of important knowledge, values, and skills. This will provide an avenue for teachers to teach not only content but also to systematically cover important knowledge, values, and skills necessary for life after school. There is also a need to formulate new assessment and monitoring systems to improve not only students' academic performance but also to monitor students' behaviours.

Lastly, it is recommended that new policies on curriculum pedagogies be initiated for teaching and learning of the social studies curriculum. What it needs are methods that are active. These include teaching methods and strategies such as dramatisation, student projects, demonstration, and other concrete examples. Overall, the social studies curriculum may be effective only if themes/topics and goals include values that are relevant and contextual to Solomon Islands. This includes moral and social values, rights taught with responsibility, national identity, and social cohesion. Moreover, social studies curriculum pedagogies need to be active and not passive as currently practised.

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Chapter 6
Student Teachers' Perception of Citizenship Education at a Fiji Teachers' College

Jeremy Dorovolomo and Billy Fito'o

Abstract As various fundamental principles of democratic life are being threatened both on a national and international scale, education is increasingly being expected to provide the response and possible answers. Teachers and teacher education then become crucial elements to citizenship education, which may include the focus of teacher education courses and perhaps vitally, the characteristics of teachers themselves. There should be orientating beliefs concerning how citizenship education and notions involving values should be taught in the school curriculum. One should advocate active participation and experience-oriented teaching–learning methods for citizenship education and civic responsibility, rather than passive teaching–learning processes. This study investigated why student teachers think citizenship education is important, how it needs to be implemented, and what contents they perceive to be core to citizenship education. It is based on a survey conducted at a teachers' college in Fiji involving 35 participants. This institution is hereafter referred to as Teachers College X.

Keywords Fiji · Citizenship education · Teachers' college · Civic responsibility · Cultural pluralism · Manage diversity

Methodology

The questionnaire has 35 prospective teachers answer three open-ended questions asking why they think citizenship education is important, ways they feel it should be taught at school, and what contents should be in citizenship education. The frequency of responses to each question was tallied, and only the top four responses were considered in the discussions.

Table 6.1 shows that most student teachers at Teachers College X feel that citizenship education is integral in developing students holistically to be responsible and fruitful citizens through making correct decisions for themselves and for the

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Table 6.1 Why do you think citizenship education is important?

Response	Tally	Percentage (%)
To develop responsible citizens	27	31
To enable children to make correct decisions	19	22
To develop students holistically (heart, hand, and head)	15	17
To help students to be better and fruitful citizens in the future	14	16
To keep young people from crime and mishaps	9	12
To help fight against racism	2	2

betterment of those around them. Interestingly, most participants' responses have been worded positively such as being responsible and fruitful rather than in curbing crime, racism, or mishaps.

Table 6.2 shows that most responses suggested the formal curriculum as a vehicle for the teaching of citizenship education. Notably, none of them mentioned early childhood education as a venue for citizenship education. In the top four responses are issues around integrating citizenship education with other subjects and in organising workshops and seminars that stem from the context and interests of participants. The paper will discuss the top four responses later, but it is worth mentioning that these student teachers are aware and made connections with the Fiji National Curriculum Framework as one of its elements is on citizenship education. This is scored lower by participants but it is useful to note the importance of prospective teachers who are already aware of national policies, frameworks, and instruments.

Table 6.3 shows that the top four responses revolved around quality leadership, culture, values, and religious education, with Catholicism being mentioned specifically as the college is Catholic-owned. There is an interesting mention of consumer

Table 6.2 How do you think citizenship education should be taught at schools?

Response	Tally	Percentage (%)
Through the formal primary, secondary, and tertiary curriculum	22	17
Through workshops, seminars, and conferences	19	14
By taking student and school interests and contexts on board	18	13
By integrating citizenship education into other subjects at school	15	11
To be inserted into school routines	13	10
Parents are important in citizenship education	10	8
Having citizenship education as a separate subject	9	7
It should be aligned with the national curriculum framework	9	7
Assessment should not be exams only	8	6
The use of case studies to model behaviour	5	4
It needs to begin with teacher education	3	2
Through professional development packages	2	1

Table 6.3 What contents do you think should be in citizenship education?

Response	Tally	Percentage (%)
Religious education and catholicism	29	23
Moral and values	25	20
Culture and beliefs	20	16
Leadership at all levels	18	14
Rights of people in society	13	10
It should not be just theoretical but to also include practical aspects	12	10
Consumer education	6	5
Voter awareness and democracy	3	2

education as an aspect of citizenship education. The authors think that it is because the Consumer Council has been active in advocating consumer rights in the Fiji media. Even though at the bottom of the rank, it is also interesting to note that voter awareness, elections, and democracy do not necessarily get much responses from participants, when it is often viewed as a pivotal component of citizenship education.

The Importance of Citizenship Education

In order of priority, the first four reasons given by student teachers of Teachers College X as to why citizenship education is important are to develop responsible citizens; enable children to make correct decisions; develop students holistically (heart, hand, and head), and; help students to be better and fruitful citizens in the future. Year 1 student teachers of Teachers College X saw that citizenship education is important in allowing students to make informed personal choices and educative decisions. As the world goes through a period increasingly characterised by turbulence, civic capacity becomes an imperative need. Facing a future of uncertainty requires active and informed citizens who can make correct and educative decisions over social, political, and economic lives. Therefore, Kennedy (2000, p. 23) emphasises that "the development of citizens who can discern and make correct judgements about appropriate courses of civic action is the single most important priority for our societies in the new century". The new century needs citizens who can evaluate alternative courses of action, develop strategies, think, and act appropriately in the public interest.

Student teachers of Teachers College X also recognise the importance of personal development, one that is holistic and builds responsible citizens. Students of Teachers College X further stressed fruitful participation by students and young people in the future. Young people can participate in society in the future, but they should also be seen to be able to participate vigorously in society now and today. The idea of

"future citizenship" should be challenged. Ignoring the youth as people who will only participate in society in a distant future encourages passivity and a disinterest in civic responsibility later in their lives. Youths disconnecting themselves from the political process in declining percentages, such as in elections, are signs of the exclusion of young people in political processes. The youth should be considered as people who can participate strongly in society from today onwards, rather than people whose participation is still "far away" into the future (Prince 1997).

Participants of the study gave some of the specific reasons why citizenship education is important, such as ensuring that students stay away from drugs and from breaking school rules. However, more specific and current reasons that tie into citizenship education were not provided as much as might have been expected. The questionnaire's lack of items for soliciting specific examples may have contributed to this. Student teachers, however, should be aware of current issues that impinge on citizenship education for young people such as young people participating less and less in political life or the increasing inter-group conflict in the world. Furthermore, student teachers need to be aware of issues surrounding extremism, uncertainty about youth employment, deforestation and its effect on the diversity of life, inequality and poverty, and civic responsibility of the mass media. There is also frequent and increasing scale of natural and man-made disasters. These and many more issues prevail in society within and outside of their countries about which students need to be aware and to possess a sense of responsibility towards. The world is interdependent whether we like it or not. Sharing the same world and public life substantiates the development of civic character among students. Mathews (1997) thus advises that civic renewal is a major challenge today as we aim to build stronger citizens for a stronger democracy.

Ways to Teach Citizenship Education

In order of strength, student teachers of Teachers College X suggested that citizenship education should be taught by four means: through the formal curriculum (primary, secondary, and tertiary); through workshops, seminars, and conferences, and; by taking student and school interests and contexts on board. Fourthly, student teachers indicated integrating citizenship education in all fields and subjects of the school. Many countries incorporate citizenship education through the social studies curriculum (Choi 2010; Xiao and Tong 2010), but it can also be integrated well with other subjects. It is interesting, nevertheless, that in their mention of the formal curriculum, none of the student teachers of Teachers College X mentioned the Early Childhood Education (ECE) setting as a vibrant venue for citizenship education. There were only mentions of the primary, secondary, and tertiary levels of education. The omission of ECE may also be a reflection of its general neglect within the Pacific Islands, even though this is improving. In Fiji, for example, a national ECE framework for resourcing and financing does not exist (Camaitoga et al. 2010), but has recently received strong government support through inclusion in the Education

Act and through the creation of a national ECE policy (UNICEF 2017). Nevertheless, Kumar (2010) stresses that the Fiji and Pacific Island governments need to direct substantial finances into ECE. There is a clear underestimation of the importance of ECE. ECE teachers are the most lowly paid of teachers in Fiji earning usually $3,500 FJD per year, which is well below the poverty line (ibid). As Sims (2010) has emphasised to a Fiji National Education Conference audience, it pays dividends to invest in ECE. Governments all over the world are spending unnecessarily on many areas that could have otherwise been spent on children's education or on hungry and disadvantaged children. ECE is imperative because it establishes the foundation for all future learning, including citizenship education, and as Korhonen and Graeffe (2007) state, the ECE setting is an important place for citizenship education, requiring teacher education institutions to prepare ECE teachers for better active citizenship results.

Most of the suggestions by student teachers of Teachers College X were confined to formal learning structures. It is important to note, however, that the way in which citizenship education is implemented is crucial. As King (1997) explains, citizenship education and character development can be communicated within the formal curriculum, but the way it is delivered also matters Karsten et al. (2002). have stressed that in citizenship education, it should not be about memorisation, passively reading texts, listening, completing worksheets, and examinations, but rather about programs and activities which enhance cooperation, critical thinking, and tolerance. However good the quality of learning materials is, there may be little effect if citizenship education and civic learning occur only in a closed classroom. Off-campus learning experiences help, developing moral reasoning of students (Pascarella 1997). Students need to put the right principles into practice, as being a good person is more than simply knowing what is morally right. No matter how much knowledge one has gained about being a good citizen and no matter how one is impressed and touched by certain moral values, it becomes useless when it is not practised in everyday life. The ultimate goal in citizenship education is acting rather than merely knowing (Lee 2001).

Three key elements of a democratic learning process are proposed by Ehrlich (1997, p. 59). The first of which is that the "process should engage students in reaching out the walls of the classroom and into the surrounding community" and thereby be focused on problems to be solved. It should also be collaborative between themselves and between students and staff. In addition, Ehrlich purports that, pedagogically, these three elements of the democratic learning process would translate into community service learning rather than closed classroom learning, in problem-based learning as opposed to discipline-based learning, and in collaborative, not individual learning. Community service learning, as a promising pedagogy for citizenship education, can appear in various forms: direct aid or token to an identified need area, education and outreach activities or simply doing policy analysis and research into how a community works, and ways to help make an impact. It should involve active, hands-on preparation of students (Ehrlich 1997).

Problem-based learning, as potential pedagogy for citizenship education and civic learning, takes the beginnings of course design by starting with a problem or problems. Depending on student ability levels, they are capable of tackling increasingly

difficult problems using more sophisticated techniques with increasingly complex knowledge bases. A problem-based approach is an important means to prepare students for active participation in the ongoing renewal of democracy. Democracy, in fact, calls for citizens to identify community problems and work communally to solve them (Ehrlich 1997; Mathews 1997). The third pedagogical tool is collaborative learning, which is important in preparing students to collaborate as members of a team. For many students, work at school is done alone, therefore, incorporating collaborative learning aims to directly enhance students' abilities to be productive members of a team (Ehrlich 1997). Higher education should increasingly incorporate such pedagogical strategies as community service learning, problem-based learning, and collaborative learning into their courses. It is vital that these activities are supported and coordinated within the academic curricula rather than taking the form of disjointed volunteering and community activities. This requires colleges and universities to expand, adopt, or revise their curriculum offerings. In addition, such curriculum innovations in civic education should still be aligned with other traditions on campus (Liss and Liazoz 2010).

Moving beyond pedagogical styles that engage students outside of the classroom, when a component of instruction occurs within the classroom itself, it should have positive influences on political attitudes and behaviour. These influences can occur when students perceive their classes to have "open climates" (Karsten et al. 2002, p. 170) where students are encouraged to explore and express differing views on controversial issues. The class can be conducted as a moral and democratic system resulting in a moral community (Karsten et al. 2002). Teacher educators need to be open to the exploration of ideas, tolerate conflict of ideas and ideals, and value student opinion. Universities and colleges have an obligation to help students lead ethical, reflective, and fulfilling lives, but it needs to also be realised that students enter higher education with a lifetime of experiences and moral lessons (King 1997). Students possess a wealth of knowledge, skills, and attitudes prior to entering our classrooms that instructors would do well to build from. These can be developed not only through appropriate pedagogy, but colleges and universities can themselves be models of how a more inclusive, democratic civic society can operate (Guadiani 1997). As stated earlier, student teachers of the sampled teachers' college only suggested implementation of citizenship education through the formal education system. However, it must not be forgotten that citizenship education can be extended through cooperation within the home and the society at large. This is an important realisation because the child is obviously influenced by life at home, life at school, and life in the community. When there is alignment between values taught at school, the home, and the child's home community, there is more likely to be long-term behaviour and internalisation of consciousness (Lee 2001; Levine 2010). In addition, supporters of the implementation of citizenship and civic education can also include non-governmental organisations, as this is not the sole province of the formal curriculum (Farouk and Husin 2011).

Content Area of Citizenship Education

There are four content areas that student teachers of Teachers College X frequently raised as being within the domain of citizenship education: religious education and Catholicism, moral and values, culture and beliefs, and leadership. It is imperative that teacher education and higher education in general have a clear vision of the knowledge, skills, and attitudes they hope their graduates would have developed through citizenship education (King 1997). Colleges and universities are involved in an exchange relationship with the wider society by providing research and service in return for grants, contracts, and donations. However, public returns are increasingly being questioned and pose pressures for higher education institutions to show their broader usefulness. Colleges and universities often legitimise their existence as instruments of progress in a democratic society. They also legitimise their existence by providing access to a cross section of their population. Moreover, there are issues regarding the quality and purpose of higher education. We can then ask, are we preparing our youths to be leaders and citizens? Are we fostering collaborative, community-based research, and developing programs that involve students in civic and service-related education? These approaches may work to help renew public confidence in higher education. Outreach must be a central obligation of the university, not in rhetoric, but in reality (Hearn and Holdsworth 2002).

Colleges and universities can nurture growth in principled moral reasoning. Pascarella (1997) after compiling more than 50 cross-sectional and longitudinal studies concluded that properly structured higher education positively associates with principled moral reasoning among students. Principled moral reasoning then helps to predict students' involvement in community and civic responsibility. Thus, higher education has significant potential to influence its citizens. Students of Teachers College X saw morals and values as critical contents of citizenship education. King (1997) stresses that there is a moral component to citizenship, while the development of morality is a complex process. King explains further that there are four major kinds of psychological processes that are necessary for moral behaviour to occur: sensitivity, judgement, motivation, and character. Moral sensitivity refers to the fact that some people fail to act morally because they simply are unaware of how their actions affect other people, or likely do not even recognise the moral dimensions of the situation at hand. Moral judgement, on the other hand, involves determining the most morally justifiable course of action. Often college and university students interpret fairness of possible negative impact on themselves, rather than empathy towards others. Moral motivation, as a moral process, entails weighing moral values against other competing values. Moral character affects moral behaviour by influencing one's ability to implement a moral plan of action. This involves working around impediment and resisting distraction to achieve moral goals.

The most frequently suggested content for citizenship education as given by the first-year students of Teachers College X, however, is religious education. Dalton (1997) agrees that religious and spiritual belief is a pertinent approach to promoting character development and civic responsibility. Personal faith and commitment help

to build core values and virtues, and often provide the conviction to act on them. Student teachers of Teachers College X also perceive culture and beliefs as salient content areas of any citizenship education program. This point of view deserves consideration because local cultural values and their relationship to political values and structures are vital. Civic capacity cannot be built on virtues that are neither alien nor built around personal and political gain. A globalised world demands global values but also needs people to retain distinct values that drive culture and development in their region. These values, however, should not be regarded as static, and in fact, require citizens to constantly evaluate change as society shifts and advances. When citizens hold onto these values fervently, they will do what they can to protect them if they come under threat (Kennedy 2000; Xiao and Tong 2010). Today, very few countries, if at all, can claim to be homogenous in race and ethnicity. Most countries are multicultural with varying backgrounds of race, ethnicity, cultures, and creed. Mature citizens are those that are aware and respectful of the existence of these differences. Respecting differences entails pursuing cultural pluralism, that is, an equality of different cultures, which is a democratic value in itself. Multicultural countries are in need of continually balancing the promotion of national identity, diversity, and global perspectives through education. The curriculum should inculcate national pride and identity, as well as placing emphasis on the idea of an interdependent global community (Choi 2010; Ho 2009).

Helping students to develop the integrity and strength of character that prepares them for leadership may be considered one of the goals of higher education (King 1997). Students of Teachers College X also recognise that leadership should be a key content area. Faculty and staff can develop student leadership by collaborating in a setting that expresses moral consensus and social coherence. Students can be members of university and college boards and committees. Student leaders can contribute to respecting campus traditions, can use its resources to the benefit of the student body, while also being able to engage imaginatively with the external environment (Gaudiani 1997). It is positive to note students of the University of the South Pacific in Fiji, for example, organising a fundraising night, in which cultural groups contributed entertainment items for a gate fee. Funds raised went towards students who need help in Christchurch, New Zealand; Queensland, Australia; and Japan, who were affected by natural disasters. It is important for students to be involved in such practical volunteer and service learning opportunities. Furthermore, there are other ways in which colleges and universities can develop leadership ability in the area of civic responsibility, such as the faculty selecting an annual theme that reflects shared values, providing volunteering opportunities for students in communities, and encouraging activities that promote intercultural understanding.

Gounder et al. (2010) reinforced the need for citizenship education to be included in the Fiji school curriculum and not have it left to chance. With an international approach to citizenship education, Koya (2011) further added that the teaching and learning of citizenship education need to be localised to the historical and sociopolitical structures of Fiji. Slatter (2014) suggests that the means by which Pacific Island countries need to "manage diversity" (p. 104) is through their educational curriculum

and also in the manner in which law and policies are designed. Managing and celebrating diversity can be a challenge emanating from decades of ethnic politics and the distrust of the "other". Ordinary people, however, live side-by-side often very peacefully, but prejudice and stereotypes can stifle inter-ethnic relationships (Slatter 2014). In Fiji, Koya (2011) reflected on who a Fijian is in the wider sociocultural and historical debate on this issue and having this sorted is important for participatory citizenship and national identity. Since the independence of Fiji in 1970, in the voting system, there are three categories: indigenous citizens as Fijians, those of Indian descent, and "others" who did not fit into the first two (Koya 2011). The Bainamara government has recognised Fiji citizens to be all Fijians and the prime minister reiterated this by stating that no Fijian is a *vulagi* (visitor) regardless of their ethnicity, gender, and religion. The critical criterion is that Fijians share a common purpose (Bia 2019). Thus, the indigenous population that had been referred to as Fijians are now identified as the *iTaukei* (Koya 2011). What citizenship education is, what should be in it, and how it should be delivered in the curriculum are contested terrains. However, ensuring there are active and engaged citizens for the betterment and future of Fiji is salient.

Conclusion

Higher education institutions may need to continually rethink what their ultimate purposes are. If this is simply skill acquisition and knowledge mastery, as has always typically dominated higher education practices, colleges, and universities may eventually become obsolete. Citizenship values, character, and civic life should more commonly be part of conversations in higher education. The dimensions of citizenship and character education may be intangible but are nevertheless important for building and forging students for the larger societal good. Higher education institutions have the challenge of helping to shape graduates to be moral citizens. Teacher education is a particular learning venue through which citizenship education can positively be channelled, given that classroom teachers are probably the single most important element in school reform and improvement.

First-year students of a Teachers College X have a relatively good understanding what they think should be included in citizenship education, how it should be taught, and the importance of doing so. This has been a crucial finding because initiatives such as citizenship education will not bear lasting results unless teachers are prepared accordingly. Teachers are usually expected to respond to new change initiatives. Unfortunately, it is sometimes the case that teachers are unprepared, unwilling, or unskilled for their new roles. Thus, it is important that issues about citizenship education are strongly advocated through teacher education institutions. The fact is that civic capacity can be deliberately developed in citizens through education, either through formal or informal learning such as through the home, society, and other

organisations. Thus, educational policies would need to strongly accommodate citizenship education, as often policies are more interested in students achieving in high stakes exams at the expense of students' self-realisation and character development.

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Chapter 7
Fijian Secondary Mathematics Teachers' Beliefs About the Nature of Mathematics and Their Self-Reported Teaching Practices

Hem Chand Dayal and Govinda Ishwar Lingam

Abstract Research suggests that the way teachers teach their subject relates closely to their beliefs about that subject. Testing the applicability of this assertion in the Fiji context, this study investigates twenty Fijian secondary mathematics teachers' beliefs about the nature of mathematics and their preferred ways of teaching the subject. Using semi-structured interviews with twenty (20) Fijian secondary mathematics teachers, the study explores their beliefs about mathematics. They were also asked to describe their customary methods for teaching the subject. The majority of teachers were found to hold absolutist views about mathematics and prefer the use of the traditional teacher-directed type of teaching buttressed by many practice examples. They are of the view that completing the syllabus and getting students ready for the examinations is of prime importance. By providing insight into the teachers' beliefs about the subject and their preferred ways of teaching it, this study opens the way for serious discussion about ways of improving the teaching and learning of mathematics and developing a better understanding of its potential value in people's lives.

Keywords Secondary mathematics · Teachers' beliefs · Mathematics teaching · Fallibilist philosophies · Absolutist views

Introduction

In the last fifty years, school-based mathematics has undergone significant changes in terms of content and teaching, both internationally and in Fiji. This has led to new roles for the mathematics teacher (Begg 2003; National Research Council 2005; Reys et al. 2012). A precursor to these changes is the importance of a shift in beliefs regarding the nature of mathematical knowledge, which affects much of what goes on in the classroom context. According to Dossey (1992), teachers' perception of the nature of mathematics and the role it plays has a major influence on the

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mathematics curriculum and instruction. Dossey observes that the understanding of different conceptions of mathematics is important to the development and successful implementation of programs in school mathematics. Teachers' beliefs and past experiences also affect their classroom-related actions. Many teachers "copy" their own teachers when they enter the teaching profession, tending to re-enact the teaching behaviours of their own favourite teachers. Studies have confirmed this impression that pre-service teachers' beliefs about what constitutes good teaching are somewhat determined by their own memories of classroom experiences (Pajares 1992; Thompson 1992).

"Conceptions" and "beliefs" have been terms widely used, often interchangeably, in related studies in mathematics education (Philipp 2007). Thompson (1992) defined conceptions as a more "general mental structure, encompassing beliefs, meanings, concepts, propositions, rules, mental images, preferences, and the like" (p. 130). In other words, her definition includes beliefs as a subset of conceptions. Philipp (2007), meanwhile, explains that beliefs can be seen as "lenses that affect one's view of some aspect of the world" (p. 259). This study adopts Philipp's (2007) understanding of the term and sees beliefs and conceptions in a rather harmonious and non-conflicting manner. Such an understanding is in line with the suggestions offered by Barnes et al. (2015) who claim that the term beliefs has been widely used in previous studies involving epistemology and beliefs about teaching content, such as science (for example, Chen et al. 2015) or mathematics (e.g. Philipp 2007; Raymond 1997).

This chapter reports some of the findings from a larger study that sought to explore teachers' perceptions about teaching mathematics at senior secondary level in Fiji. Though the major aim of this study was to explore secondary mathematics teachers' beliefs about mathematics, a second and related aim was to ask teachers to describe their usual ways of teaching mathematics. In the wealth of information on teacher beliefs, a majority of the studies relate to pre-service teachers (Beswick 2012). The present study is relevant on two counts: it focuses on full-time senior secondary school mathematics teachers' beliefs, and it provides findings from a Pacific Islands context. Relatively little research on teacher beliefs has been reported from Pacific Islands contexts, including Fiji.

Theoretical Framework

Hersh (1979) argues that the starting point for consideration of the teaching of mathematics should be the definition of what mathematics is all about, rather than posing the question of what is the best way to teach mathematics. In other words, all teaching and learning of mathematics rests on implicit epistemologies or philosophies of mathematics, and personal philosophies of mathematics also have powerful pedagogical consequences. Thom (1973, p. 204) expresses this bluntly in his assertion that "all mathematical pedagogy, even if scarcely coherent, rests on a philosophy of mathematics".

One wide range of perspectives in the philosophy of mathematics can be termed *absolutist*. Philosophies of mathematics of this type include views such as Euclidean (Lakatos 1978), absolutist (Lerman 1983), Platonist (Ernest 1988) and traditional (Raymond 1997). Chambers and Timlin (2013) see that such an outlook represents the views of pure mathematicians. They call this a purist—and also, arguably, the purest—view of mathematics. Absolutist philosophies of mathematics, taking mathematics to be a body of absolute and certain knowledge (Thompson 1992), believe that mathematical truths are universal, absolute, value-free and culture-free, and independent of human creation. Mathematics was discovered, not invented, absolutists argue. Mathematical knowledge is seen as timeless, superhuman, ahistorical, value-free and culture-free (Ernest 2000). Although still dominant, absolutist ideas are increasingly subject to challenge and attack. Nevertheless, teachers with absolutist conceptions of mathematics continue to see the knowledge subject as a collection of unchanging concepts and skills, facts and rules: this stance has a strong impact on their perceptions of how mathematics should be taught (Chambers and Timlin 2013).

What may be labelled *fallibilist* philosophies, on the other hand, propose a conception of mathematics as human, corrigible, historical, value-laden and changing, or they admit that mathematical ideas at any point in time may be fallible. This new view is in line with the "problem-solving view" (Ernest 1988) of mathematics and challenges the dominant absolutist philosophies. Hersh (1986) identifies three main properties of mathematics that adhere to this new view and challenge the assumption that mathematics is absolute and infallible. He suggests that mathematical knowledge is created by humans from activity with already existing mathematical objects and from the needs of science and daily life. According to Hersh (1986) mathematical objects, once created, have features that are well determined and difficult to discover. These properties are possessed independently of our knowledge of them. Hersh (1994) argues that it is not sufficient to define the existence of things in the world using physical and mental categories only. He adds a third category, which he calls "socio-cultural-historical" entities. He then asks this important question: Is mathematics socio-cultural-historical? Answering yes to his question, Hersh gives the following explanations. First, mathematics is historical. It has a long history dating back to the time of the Babylonians. Mathematics is seen as a social entity as well, because mathematicians work with other mathematicians. Finally, mathematics is a cultural product because it is responsive to the needs of the society. Therefore, mathematics is a special kind of "socially shared idea" (Hersh 1994, p. 17). Jardine (1994) sees mathematics as something that is "right in front of us, at our fingertips, caught in the whorl patterns of skin, in the symmetries of the hands, and the rhythms of blood and breath" (p.112). In this perspective, mathematics can be seen as an applied field that is constantly evolving (Chambers and Timlin 2013).

In summary, we can view mathematics using two different lenses. On the one hand, we see it as a body of abstract knowledge that is available for individuals to rediscover and improve upon. This view sees mathematics as a set of unassailable truths and value-free facts. The other lens reveals mathematics as arising from the needs of the people at a particular time. This approach, a more recent one, views

mathematics not as a static product but as an ongoing activity of people. Although teachers could hold a mixture of the two belief frameworks (Raymond 1997), this study assumes that it would be reasonable to classify teacher beliefs using these two categories.

Teachers' Beliefs About Teaching Mathematics

A teacher's understanding of the nature of mathematics influences his or her view of how mathematics should be taught (Beswick 2006, 2012; Nisbet and Warren 2000). Speer (2005) also identifies beliefs as "one of the significant forces affecting teaching" (p. 364). Two types of research are common in the area of beliefs about teaching mathematics. One type has focused mainly on a descriptive analysis of mathematics teachers' beliefs about teaching and learning, and their beliefs about mathematics as a subject. The second category has been more interested in exploring a relationship between teachers' beliefs about mathematics, teaching mathematics and their classroom practice (Boz 2008).

Nisbet and Warren (2000) find that two schemes for classifying mathematics teaching are prevalent: a "transmission" approach and a "constructivist" approach (p. 36). This "traditional view" (Raymond 1997) "reflects a classroom environment that is dominated by timed tests, with little hands-on experience and little consideration of the relationship between mathematics and the real world" (Nisbet and Warren 2000, p. 40). The contemporary or the constructivist view (Nisbet and Warren 2000) or the non-traditional view (Raymond 1997) means teaching mathematics with many hands-on experiences, lots of interaction among students, and students experiencing mathematical problems that belong to the real world (Nisbet and Warren 2000). Alternatively, Kuhs and Ball (1986) identify four distinct views of how mathematics should be taught: (i) content-focused with an emphasis on performance, (ii) learner-focused, (iii) content-focused with an emphasis on conceptual understanding and (iv) classroom-focused. The "content-focused view with an emphasis on performance" can be aligned with the "transmission view" while the "learner-focused" view is in line with constructivist principles.

The Nisbet and Warren (2000) study found that teachers are either "traditionalists with a transmission approach" or they "have been convinced of the merits of the contemporary (constructivist) approach" (p. 43). The study noted that a greater number of teachers held a contemporary view of teaching mathematics. Their study also notes that factors such as years of experience in teaching mathematics and levels of qualifications in mathematics have no relationship with teacher beliefs. In another study, Ly and Brew (2010) compared Vietnamese pre-service secondary mathematics teachers' beliefs with those of their Australian counterparts. The study noted that both groups of pre-service teachers held the view that "mathematics was a creative endeavour" (p. 82) but at the same time, neither group showed significantly strong views against the traditional teaching approaches.

Boz (2008) is of the opinion that many pre-service mathematics teachers believed that "mathematics teaching meant transferring the correct information to students" (p. 67). In other words, the dominant view of teaching mathematics has been the "traditional" (Boz 2008; Towers and Proulx 2013) or the "transmission" (Nisbet and Warren 2000) style. Despite some recent studies showing mathematics teachers holding "constructivist" (Nisbet and Warren 2000) or "non-traditional" (Boz 2008) beliefs about teaching mathematics, research such as that by Ly and Brew (2010) tells us that mathematics teachers do not show a strong rejection of the traditional approaches to teaching mathematics. This may well indicate that these teachers have become successful by experiencing the same traditional approaches that give prominence to procedural knowledge rather than conceptual understanding during their school days. We are aware that beliefs about teaching mathematics are formed earlier, and that past school experiences play a crucial part in contributing towards the formation of beliefs (Prescott and Cavanagh 2006; Ly and Brew 2010).

Research also informs us about the existence of "constructivist" beliefs about teaching mathematics (Boz 2008; Beswick 2006; Ly and Brew 2010; Nisbet and Warren 2000). Boz (2008) reports findings from a study involving forty-six (46) Turkish pre-service secondary mathematics teachers. This study explored pre-service teachers' beliefs about teaching mathematics by asking them to respond to four aspects of teaching. These include teachers' instructional approach, role of the teacher, interaction between student and the teacher during the class and interaction among students during the class. The study found that the dominant belief about instruction in mathematics was the non-traditional belief that meant teachers must avoid memorisation of formulas and place more emphasis on student-centred teaching. With reference to the second criterion, regarding teachers' roles, the majority of the pre-service teachers again held non-traditional beliefs. In other words, the pre-service teachers perceived the role of the mathematics teacher as a "guide and coach" for the students (Boz 2008, p. 73). The majority of the pre-service teachers also agreed that there should be interaction between the student and the teacher as well as among peers.

Teachers' Beliefs and Classroom Practice

Investigation of teachers' beliefs has become a significant research area in the last two decades (Pajares 1992; Thompson 1992). Recent research has suggested that teachers' beliefs about their subjects and approaches to teaching are closely related to classroom practice (Nisbet and Warren 2000). According to Thompson (1992, p. 132), a teacher's conception of the nature of mathematics is his/her "conscious or subconscious beliefs, concepts, meanings, rules, and mental images", concerning the discipline of mathematics. These constitute a formulation of one's philosophy, which may be at different levels of articulation and coherence.

For some (for instance, Thom 1973) all mathematical pedagogy rests on a philosophy of mathematics. For others (for instance, Hersh 1986), one's conception of

what mathematics is affects one's conception of how it should be presented. In other words, a teacher's understanding of the nature of mathematics dictates his or her view of how mathematics should be taught. Thompson's (1984) investigation of high school teachers' beliefs and their classroom teaching confirmed this view to some extent. In that particular study, she found a high degree of consistency between teachers' professed conceptions (their beliefs, views, and preference) of mathematics and the way they typically presented the content. For example, Jeanne, a teacher holding a "Platonist view" of mathematics, focused more on mathematical meanings of concepts and the logic of mathematical procedures; while another teacher, Kay, who held a "problem-solving view" of mathematics engaged students a lot in mathematical activities.

In another study, Lerman (1983) sought the views of four pre-service mathematics teachers by first carefully classifying them as either absolutist or fallibilist, and then noting their reactions to a video recording of a mathematics lesson. He found that two of the teachers, who held absolutist views of mathematics (parallel to Ernest's Platonist view), were critical of the teacher in the video for not directing the students more. The other two teachers, who held fallibilist views of mathematics (parallel to Ernest's problem-solving view), thought the teacher in the video was too directive (cited in Ernest 1988).

Pepin (2002) studied conceptions of mathematics teachers in three countries: England, France and Germany. She also concluded that teachers' conceptions of mathematics are manifested in their instructional practices. In a more recent study, Beswick (2012) investigated teachers' beliefs about the nature of school mathematics and mathematics as a discipline. The case study approach allowed for fewer teachers' views to be explored in detail. Teachers were also asked about their beliefs about mathematics teaching and learning, and these were confirmed by classroom observations. One of the teachers, Sally, who was an experienced teacher, held beliefs about mathematics (as a discipline) and school mathematics that were consistent with Ernest's problem-solving view of the nature of mathematics. This view fitted well with her belief about the teaching and learning of mathematics, which inclined more towards a student-centred view of mathematics teaching. Another teacher, Jennifer, on the other hand, held no clear beliefs about the nature of mathematics. Her beliefs had components of all three categories of Ernest's categorisation (instrumentalist view, Platonist view and problem-solving view). Jennifer, who was a relatively inexperienced teacher at the time of the study, mostly held the Platonist view of mathematics. Nor were her beliefs about mathematics teaching and learning clear or rigid: she described herself as "yet to decide whether a traditional approach or a more inquiry-based teaching approach was most effective in terms of students' mathematics learning" (Beswick 2012, p. 140), and this was evidenced in her actual classroom practice.

In summary, there is some evidence of consistency in teachers' professed beliefs about mathematics and their classroom practice, although some studies, such as that by Raymond (1997) have pointed to different conclusions. That beliefs do play an important part in teachers' attitudes and practices are generally accepted (Koehler and Grouws 1992; Thompson 1992). McDonough and Clarke claim that despite some

teachers having made changes in aligning with the more contemporary constructivist model of teaching, a majority of teachers appear not to have rejected an authoritarian, transmission style of teaching (McDonough and Clarke 2005).

Context of the Study

The Republic of the Fiji Islands, a former British colony, is a small island nation in the South Pacific: a population of fewer than one million people calls these small islands home. The country's education system is well established from pre-school up to tertiary levels. Approximately 735 primary schools and 178 secondary schools constitute the bulk of the system, the primary schools usually catering for years 1–8, the secondary schools for years 9–13. The central authority is the Ministry of Education, Heritage and Arts (MEHA; formerly the Ministry of Education), although a majority of the schools are owned and managed by local committees, including religious bodies. After successful completion of secondary school, students wanting to become teachers can enter one of the five tertiary institutions that provide teacher training.

During the time of the study, the education sector in Fiji was in the throes of many changes in the areas of curriculum and assessment. A quick mention of some of the shifts and changes gives a taste of the slow-yielding grip of adherence to the colonial legacy in the field of schooling. Included was the abolition of national examinations at Years 6, 8 and 10. At the primary school level, the National Literacy and Numeracy programme (LANA) was introduced for years 4, 6 and 8, while the abolition of these national examinations led to the introduction of so-called formative assessments in the form of class-based assessments (CBAs) from Year 1 up to Year 10. At the upper secondary level, two national examinations–*Fiji School Leaving Certificate* at Year 12 and *Fiji Seventh Form Examination* at Year 13–have been continually administered since 1989. Recently, following the successful national elections in 2014, the newly appointed Minister of Education has asked for a revision in curriculum from years 1 to 13. Calls have also been made to make mathematics a compulsory subject in schools.

With respect to the training of mathematics teachers in Fiji, pre-service secondary teacher training was provided at the Fiji College of Advanced Education (now part of the Fiji National University) and at the University of the South Pacific (USP). The former Fiji College of Advanced Education trained Years 7–10 teachers and offered a two-year Diploma in Education course in four major teaching areas: English/Social Science, Mathematics/Basic Science, Accounting/Economics, and Home Economics. Until its recent discontinuation, USP previously offered a 3-year Bachelor of Education (Secondary) pre-service with a single teaching subject major. Today, USP offers a four-year teacher training course with two teaching subject majors. Pre-service teachers can take up two teaching subject majors in the form of either a BA or a BSc and can also take education units in order to gain a Graduate Certificate in Education (GCED). Students graduate with a BA GCED or BSc GCED.

Method

Participants

Twenty (20) mathematics teachers teaching Years 11 and 12 made up the sample in this study. In the Fijian context, because of teacher qualification requirements, it would be fair to assume that the mathematics teacher population is tending towards more homogeneity than in the past. Based on this assumption, the study made use of purposive sampling as a way of keeping in mind that the focus of the study was to gain a deeper understanding of teachers' beliefs (Punch and Oancea 2014). One of the key features of the purposive sampling was linked to researchers' and participants' convenience. In other words, the twenty people who volunteered via initial telephone contact communication expressed willingness to give an interview and became the participants in this study. Of these twenty interview volunteers, two (2) were Vice Principals, five (5) Heads of Department, eleven (11) Assistant Teachers and two (2) officers working at the central administration. All twenty (20) had tertiary qualifications in mathematics and teacher training. Fifteen teachers had an undergraduate degree, three had diploma in education, while two had postgraduate qualifications in mathematics. Five (5) were females and fifteen (15) males, a gender imbalance representative of the overall mathematics teacher population in Fiji, in which the majority of the mathematics teachers are male. The participants, all from the greater Suva area, shared an average of ten years of teaching experience at secondary school mathematics teaching.

Instrument

To start the exploration of the beliefs of mathematics teachers about mathematics, the following lead questions were put to the participants: *What is mathematics? How would you define mathematics in your own words?* After the participants had responded to the beliefs item and the researcher was satisfied that the participants' sets of beliefs could be classified into one of the beliefs categories, the participants were asked, in similarly open-ended questions, how they would describe their usual style and method for teaching mathematics: *How do you normally teach mathematics? Can you describe your typical mathematics lesson?* Each one-to-one semi-structured interview (Punch and Oancea 2014) lasted for approximately fifteen minutes and all were tape-recorded and transcribed. Data were analysed qualitatively to look for emerging themes or patterns in the interviews. Descriptive and pattern codes (Miles and Huberman 1994) were useful in identifying the categories in the data and conceptualising the data. In other words, teachers' beliefs about the nature of mathematics sorted into two categories: absolutist and fallibilist views. Furthermore, their descriptions of typical mathematics lessons were coded using two categories: traditional and non-traditional. Finally, the possible interconnectedness between a

teacher's belief about mathematics and his or her description of classroom practice was scrutinised to look for any consistencies. In the following results' section, each participant is identified by a capital letter ID allocated according to the order in which the interviews were conducted.

Results and Discussion

Absolutist Views

According to Lerman (1983), an absolutist perspective perceives mathematics as universal and absolute, value-free and abstract. A majority of the participants (13 out of 20) offered a variety of responses that could be aligned to this view, one way or the other. For example, two participants saw mathematics as pre-existing and something that was made by God. "*Mathematics is a God-given subject. Man just discovered it"* (Interview A). *"God made mathematics because all things are made by Him"* (Interview F). This view is popular and in line with the abstractness and high status that people ascribe to mathematics. The relation to God signifies a kind of reverence and awe (or fear) of the subject. Seven of the thirteen participants saw mathematics as an abstract subject. They defined mathematics using mathematical content or concepts such as numbers, rules or algorithms. Some of the typical responses included: "*Mathematics is about following rules"* (Interview G); "*It is about use of numbers and calculations"* (Interview K); "*Mathematical problems have only one correct answer"* (Interview P). Four of the thirteen teachers in this group saw mathematics as a difficult subject. They argued that mathematics was a subject that was not meant for everyone. Two of the responses were:

> It is a subject for only a select group. Not everyone can do maths. It could be explained to everyone but not all people will be able to understand. Some of the topics are very abstract and to relate them to real life situations to attract attention of students is very difficult. (Interview B)
>
> I believe that not every student can do maths. Only some can do maths. (Interview C)

The views of mathematics reported above are consistent with the views portrayed by the teacher named Jeanne in Thompson's (1984) case study of three mathematics teachers. Jeanne viewed mathematics as a coherent subject comprising logically interrelated topics and emphasised the logic of mathematical procedures in her classrooms. All the participants whose beliefs were classified as absolutist described their typical lessons as having elements of traditional forms of teaching. In other words, when asked to describe their typical mathematics lessons, they focused on features such as recap of previous day's work, presentation of summary notes and examples on board and doing lots of pencil and paper activities. This group of participants heavily emphasised passing of examinations and working through the past years' examination papers:

> I know beforehand that many students in my class cannot discover so I focus just on transmitting facts and formulas for students to cram for exam purpose. I know that after they pass, they will forget and never use maths later. (Interview D)
>
> I try my best to make them pass exams. (Interview C)
>
> I go in and introduce the topic and build from what they know from the lower classes. A discussion to build on what they know and then I do today's lesson. The students ask and answer questions, copy notes and examples – and then they go to the exercise book and do exercises. (Interview F)

In the Fiji education system, examination results are an important yardstick for measuring teacher competence and effectiveness; since their reputation depends on results, teachers cannot afford to ignore them altogether. The participants who held views of mathematics that were mostly absolutist in nature agreed that the role of the teacher is to transmit mathematical knowledge and to make sure the learners have received this mathematical knowledge. The prevalent view was that mathematics is basically computation and memorisation of facts and formulas, and the job of the teacher is to transmit this knowledge. The majority of participants described typical lessons that followed a sequence: the teacher walked into the classrooms, marked the previous day's work, introduced new lessons with a few examples, and then students were left to work on exercises. Many participants believed that mathematics was not for every child so training students to master exercises were the best option.

In summary, participants whose views were classified as absolutist gave accounts of their own lessons being dominated by textbook and blackboard lessons in which students were expected to sit, listen and write. Perhaps the students' sole contribution would be to work out problems on the blackboard. From the descriptive accounts of these participants, it could be inferred that Fijian mathematics classes are still dominated by the traditional teaching–learning style where there are long periods of individual seated work and minimal time for class discussion.

Fallibilist Views

The fallibilist perspective (Lerman 1983) is that mathematics is developed through conjectures, proofs and refutations and that uncertainty is acceptable. According to Hersh (1986), mathematics deals with ideas that are created by humans, not arbitrarily, but arising from activity with already existing mathematical objects and from the needs of science and daily life. This view of mathematics parallels Ernest's (1989) *problem-solving view* of mathematics, which holds that mathematics is a continually expanding field of knowledge and its results are open to correction, revision and renegotiation as new meanings emerge. Descriptions of the subject that seven out of the twenty participants gave could be classified as fallibilist. They argued that mathematics is an art and students need to realise how mathematics is used in their daily lives. The use of mathematics in people's daily lives means that mathematics was made by man to help him survive. For example, one participant argued that "M*athematics is made by man to meet the daily needs of life*" (Interview J), while

another said "*Maths is an art. Each student has to realise and use maths at each step. Teachers cannot transmit maths knowledge*" (Interview E). Another said, "*Maths is something used in daily life, for example, when we cook or when we play, we use maths everywhere*" (Interview: H).

Such responses clearly indicate that this group of participants leaned towards fallibilist views of mathematics, which is in contrast to the rigid and rugged image of mathematics proposed by the previous group of teachers. The descriptions three of the participants gave could be classified as fallibilist: their typical classrooms contained elements of a non-traditional mathematics classroom, including support for the use of varied approaches such as group work, peer teaching and an overall support for learning with conceptual understanding. The non-traditional classrooms the three participants described reflected a view that mathematics was not only for a selected few or it was not all about passing the examinations.

> While I teach maths, I go with a vision that I am teaching everyone in the class but only a few students would be able to comprehend my teaching. It doesn't mean that those who don't understand what I am teaching are incompetent, maybe my teaching pedagogies need to be restructured to suit their comprehension levels. (Interview I)

> I try my best to use a variety of discovery or practical ways in classrooms. Problem is that I can't use discovery teaching every day or in every topic because of the unfamiliar situations. (Interview J)

> I believe you need to teach mathematics for understanding and that is the basis of how I teach mathematics. A typical mathematics lesson would begin with a challenging question to make the students think. By the end of the lesson, we would try to answer that challenging question. (Interview M)

Not all the participants in this group gave a description fitting the non-traditional classroom. Four of the participants who gave a view of mathematics that could be classified as fallibilist described their typical mathematics lessons as having elements mostly reminiscent of a traditional classroom. They gave reasons such as large class sizes and examination pressure to support their actions. For example, participant E, who claimed that mathematics is an art, gave the following description of her typical mathematics lesson:

> Classes mostly have 45 plus students, so I can't attend to individual students. Students are basically sitting in groups and I have to explain the notes, solve a few examples, and do the exercises in the 40 min of class time. Some questions are given for homework and that is marked in the next day's lesson. (Interview E)

Conclusion

The purpose of this research was to explore Fijian secondary mathematics teachers' beliefs about mathematics. This study also sought teachers' descriptions of their typical mathematics lessons. It was hoped that teachers' descriptions of their typical lessons would provide sufficient insights into their beliefs about teaching, and their classroom-related practice. The participants' responses to the interview items reveal

that the majority of Fijian secondary mathematics teachers hold what can be classified as an absolutist view of mathematics. Participants' descriptive accounts of their typical mathematics lesson reveal that those holding an absolutist belief about mathematics also describe their typical mathematics lessons as having strong elements suggestive of the traditional classroom. Seven out of the twenty teachers gave descriptions of mathematics that could be loosely classified as fallibilist. Of the seven, only three teachers described a typical lesson of theirs that had elements in line with the non-traditional classroom environments; the other four fallibilists, though, admitted that they continued to use traditional teaching approaches.

The current study had limitations in two respects. First, it covered a relatively small sample of secondary mathematics teachers. Secondly, it relied primarily on descriptive accounts of participants' typical mathematics lessons to obtain insight about their teaching-related beliefs. According to Boz (2008), the first category of research in the area of teacher beliefs has mainly focused on providing descriptive analyses of mathematics teachers' beliefs about teaching and learning, and their beliefs about mathematics as a subject. Another category of research in relation to mathematics teachers' beliefs has focused on exploring a relationship between teachers' beliefs about mathematics and the best way of teaching mathematics, and their actual classroom practice (Boz 2008). The present study has provided sufficient insights into the first category of research coupled with some emerging perspectives on the second category, research on teacher beliefs. In terms of implications for future study, it would be worthwhile to include classroom observations of a smaller sample of participants to confirm their beliefs about the nature of mathematics and beliefs about mathematics teaching by exploring the accuracy of participant narratives against their actual classroom practice. Classroom observations could also be useful to explore the role played by teacher beliefs in teachers' instructional decision-making. Further studies should also target exploring the relationship between classroom practice and teachers' beliefs in order to establish which factors help shape teacher beliefs, and/or how teacher beliefs shape classroom practice.

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Chapter 8
Gender Differences in Recess Play in Five Fiji Primary Schools

Jeremy Dorovolomo

Abstract This study aimed to investigate gender differences in the level of social interaction and types of play and games in which class four pupils in five Fiji primary schools in Suva are engaged during school recess. Five researchers observed 168 (male $n = 79$, female $n = 89$) class four pupils over three months, using scan sampling. With a mixed method approach, the study analysed quantitative data using the Kruskal–Wallis test, while qualitative data was gathered via five focus groups with recess observers. Qualitative data derived from these focus groups were used as a smaller component of the study to support quantitative findings in the *dominant–less dominant* mixed methods study. It was found that boys are significantly into 'vigorous' and 'fantasy' play more so than girls, while girls are engaged in 'conversation' more than boys during recess. This indicates that boys play more vigorous activities during recess than girls. Furthermore, it also indicates that boys may view recess as opportunity to be engaged in vigorous play, while girls may see it as opportunity to socialise with their friends. These and other discussions will have implications for a recess policy in Fiji.

Keywords Fiji · School recess · Recess play · Fantasy play · Vigorous play

Introduction

Children have played throughout history and in all cultures. Play can be understood as pleasurable, self-motivated, non-goal-directed, and spontaneous behaviour, free from adult-imposed rules. Activities controlled by adults or machines such as television or video games are non-play (Stork 2005; Teri 1996). Children's right to play must be defended and preserved by all adults (Evans 2003; Zygmunt-Fillwalk and Billelo 2005). The *United Nations Declaration of the Rights of the Child* states that 'The child shall have full opportunity for play and recreation which should be directed to the same purposes as education; society and the public authorities shall endeavour to

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promote the enjoyment of this right' (O'Brien 2003, p. 2). Recess is a good venue to promote the child's right to play. Outdoor recess is a low-cost but powerful incentive to stimulate learning, yet seldom included as a repertoire of rewards (Geiger 1996). Many schools do the opposite, by denying recess to the child as punishment rather than as a reward (Blackwell 2004). Thus, the advice is to let the recess bells ring, along with the laughter of children on the playground (Chaille 2001).

There is a need to make available both equipment and facilities to provide equal access between boys, girls and age groups (Okely et al. 1998). In fact, when planning for new schools, recess should be a major priority by thinking of the space and building plans (Blackwell 2004). However, many schools have taken out swings, seesaws and roundabouts, citing non-compliance to safety standards and that this equipment is the cause of accidents and injuries. This has implications for the amount and type of physical activity children do at school. Children love to play with equipment that they can change, move and manipulate. They should be allowed to participate in active games during recess because it is always a delight to see pupils enjoy physical activity (Evans 2003).

Games are guided by explicit rules that are set in advance, and violation of these rules usually results in some form of sanction, and are not re-negotiated (Pellegrini et al. 2002). Giving children time out of the classroom during recess allows them to develop games, rules, and to be part of activities of their own creation (Zygmunt-Fillwalk and Bilello 2005). Playing recess games increases children's aerobic endurance, muscular strength, coordination, and control of excess weight gain and related ill health (Waite-Stupiansky and Findlay 2001). However, boys play more games than girls, especially chase and ball games, while girls play more verbal games (Pellegrini et al. 2002). The variety of boys' games increases as they go up classes (ibid). Ball games increase as children age and chase games decrease during recess (Blatchford et al. 2003; Evans 2003). Boys tend to play more ball games than girls do (Ridgers and Stratton 2005). Twarek and George (1994) after the study of 402 elementary school pupils also concluded that girls' choices of recess activities were more limited than boys. According to Dahmes (1993), however, during break time, boys' games narrowed, instead of increasing as they aged, because they concentrated more on organised games, while girls' activity range remained constant.

By middle childhood, Boulton (2005) found that rule games benefited boys more than girls. It is the norm for boys to devote lots of time on rule-governed games during recess. Boys' game networks are also larger than those of girls' (Evans 2003). Boys also engage in more vigorous activities and exercise during recess than girls at the middle childhood age. In a study of 228 boys and girls, boys were involved in more moderate to vigorous physical activities (MVPA) than girls (Ridgers et al. 2005). Furthermore, Ridgers and Stratton (2005) found that boys were engaged in higher levels of MVPA than girls were, during recess. However, in a study of 22 school children in third and fourth grades, Mota et al. (2005) found that girls were involved in more MVPA than boys; thus, recess is a valuable setting to promote physical activity for girls. Boyle et al. (2003) added that while boys were more active, most girls are indeed physically active at recess.

O'Brien (2003) as a parent volunteer during recess at her child's school for a year, noted the importance of outdoor play during recess for providing an opportunity to speak and act unfettered by adult expectations. She recommended that schools provide an environment that would allow high-quality recess experiences for children. High-quality recess experiences are those in which children of all ages have a high degree of choice in physical activity at recess (Chaille 2001). Play and games during recess, like nutrition, are vital to develop the potential of all children (Stork 2005). Recess has not traditionally been seen as an achievement-setting activity. Instead, recess has increasingly been seen as taking away time for achievement activities and schoolwork. But recess is arguably an achievement context (Watkinson et al. 2005). Families, schools and other institutions are encouraged to reconsider their attitudes and priorities about play, games and recess (Frost 1998), because recess is the fourth 'R' helping children learn the other three (Waite-Stupiansky and Findlay 2001).

Therefore, the major research question of this study was: What are the differences in boys' and girls' recess social interaction and types of activity in Fijian primary school settings?

Methodology and Methods

This study incorporated a mixed method approach. This research project used a mixed method design, combining quantitative and qualitative approaches (Tashakkori and Teddlie 1998). The type of mixed method approach this investigation uses is the *dominant–less dominant study,* where the quantitative approach is the dominant paradigm used, while a minor component of the study is drawn qualitatively (ibid). Specifically, quantitative analysis was conducted through the Kruskal–Wallis test and qualitative data was drawn from focus groups, to support and help explain quantitative results. This is congruent with what Barbour (2007) stresses by demonstrating that focus groups can be used in mixed method approaches to illuminate results and furnish explanations following a quantitative phase. Focus groups can usefully be employed as a stand-alone method or as part of a mixed method approach, as in this study. In this case, it is being used to its advantage by illuminating quantitative results.

Direct Observations

Direct observations of pupils during recess were employed. According to Leff and Lakin (2005), direct observations of playground behaviours tend to be more objective than relying upon peer, teacher or parent reports. Scan sampling was used to observe pupils during recess and break times. Scan sampling involves rapidly scanning a group of subjects. The activities are recorded at pre-selected moments, for example, every minute over 30 min. This is as opposed to focal sampling where observation is

focussed on one subject at a time (Pellegrini et al. 2002). Scan sampling observation guidelines were given to observers:

- The observer censuses an entire group at once, at regular intervals and the behaviour of each individual is recorded. Whatever the individual is doing at the moment of scan is recorded.
- This means you would need to scan all your children in the minute.
- Scan every minute for 10 min, rest for two minutes and start again, until 30 min is up.
- Each minute, a tally is put against each child against the *Level of Social Interaction* and *Type of Activity* they were engaged in during the time. Observation starts from the pupil at the top of the class list to the end and this is repeated until the 30 min expires each recess break.
- At the bottom of the observation sheet, comments and/or descriptions of what children did, or about individuals or groups of students for the day are written. This is done after the break or another time during the day.
- You only observe pupils in your class alone. They could be playing or sitting with others from another class, but your recordings are on your own pupils exclusively.
- One observation sheet is used each day.
- A stopwatch is used to time your process.

Five primary schools in Suva, the capital city of Fiji, were purposely sampled: a Muslim, Catholic, Hindu, *iTaukei*-Fijians, and a parent-controlled school. One of the grade four classes from each of these schools was engaged. The class teachers are the observers during recess and breaks. There are two such breaks in the day's schedule; the first one is usually shorter than the lunch break. Combined minutes for the two breaks ranged from 45 to 85 min within the sampled schools. The 30 min observation time each school day was decided by consensus to cater for the schools with the shorter break times. There were two male and three female teachers serving as the observers. Formal permission to conduct research was taken from the Fiji Ministry of Education. Access to the sampled schools was negotiated via a letter, which was followed up with a formal visit to see the Headteachers. The Headteachers were all very helpful and quickly picked a class four teacher to work with the researcher. The purpose of the research and implications of findings for the school were explained. Parents of each child received an information sheet and signed consent was received from all parents of observed children.

A half-day workshop was held to familiarise observers on the aims of the research project and particularly their roles. Going through the standard observation checklist was an important task during this workshop, in order to ensure that each observer was undertaking the coding similarly. The length of observation time was planned for over three months for every single recess during weekdays. This is a long time to be spending recess time observing, so it was crucial that they understood what to do. The first week was spent piloting the observation technique at their various schools. The whole group met at the end of the week to discuss observers' experiences. Surprisingly, despite the training workshop, only one of the observers recorded correctly during the pilot phase. Thus, the lead researcher presented the observation

process again. A fault in the observation sheet was also identified and corrected. Following these modifications and reiterations, the observation style was consistent in the second week, so observers then proceeded to the completion of the scheduled time.

Observers are very busy during recess because children may not necessarily stay in one area during the time. Observers and the researcher met regularly to discuss experiences and progress. The researcher also collected the weekly observations from each observer. Information collected on students who missed classes consistently were excluded from data that was analysed.

The standard observation list contains the types of activities and the levels of social interaction children engage in. These definitions are taken from Blatchford et al. (2003, pp. 488/9).

Level of Social Interaction

Children were coded as being in one of three states of social interaction:

1. Solitary—the target child is not interacting or in a parallel activity with other pupils, irrespective of proximity, e.g. standing on the edge of a game watching or sitting by himself/herself at a place.
2. Parallel—the target child is situated in close proximity to another child, and they are both doing the same activity but are not talking or interacting in a socially organised activity.
3. Social—the target child is engaged in physical and/or social interaction or involved in a socially organised game or activity (includes children doing parallel activities but also talking).

Type of Activity

Children were coded as engaged in one of the following activities:

1. Conversation—the target child is involved only in conversation and when asked what they are doing they say just ‘talking’ or something to the same effect.
2. Vigorous play—the target child is engaged in vigorous activity (e.g. cartwheels, spinning, running).
3. Sedentary play—the target child is engaged in non-vigorous activity (e.g. drawing, reading, playing with cars).
4. Fantasy play—the target child is engaged in imaginative/role play. This supersedes vigorous/sedentary play (e.g. mums and dads, families, cops and robbers).
5. Chasing/catching/seeking—the target child is involved in a game in which pupils run after or look for others with the aim of touching (physically or with

an object usually a ball, and thus, this supersedes ball games), catching (no object involved), or just seeing them.

6. Racing—the target child is involved in a racing competition with others the aim being to win. They may compete together, as pairs, etc., or time each other.
7. Ball games—the target child is involved in a game within which players use a ball, including pig in the middle, throwing and catching, tennis, soccer, basketball and other derived games, e.g. kickball.
8. Jump skipping—the target child is involved in a game in which individuals skip with a rope each or where a rope is shared.
9. Games with materials—the target child is involved in other games with rules that use materials (e.g. throwing hoops over pegs, board games, frisbee).
10. Verbal games—the target individual is involved in an activity in which children sing or say verbal rhymes (e.g. dipping [‘eanie meanie minie mo’], actions and rhymes or singing and dancing, unless this is accompanied by another category, e.g. skipping, when it is superseded).
11. Other—the target individual is involved in activities that are not covered by non-games or games above (e.g. musical statue, please Mr. Crocodile, hopscotch).
12. Nothing—no activity/game or play.

Focus Groups

Five focus group discussions were held during the course of the study. Focus groups have the capacity to reflect issues and concerns salient to participants other than merely that of the researcher (Barbour 2007). Participants in the focus groups were the five observers. These focus group discussions were all held at the researcher’s workplace staff room, with lengths of discussions from forty minutes to an hour. These focus group discussions were all recorded, by permission, and transcribed by the researcher. By transcribing the discussions, it pays dividends in terms of being familiar with the data. In these focus groups, observers updated what they had been doing and this also helps in the uniformity of how each had been recording observations. They shared their current experiences with observations and what they have learned over the week. Light refreshment was provided in all focus group sessions. Barbour (2007) emphasises the worth of considering refreshments as a way of showing gratitude to participants and encouraging a relaxed atmosphere. Barbour suggests that participants spend their time to be in your focus group; therefore, it is good to provide light refreshment. Observers of this study are class teachers who attend the focus group after a day’s work, so a small token of refreshment is appreciated, often a cup of tea or coffee and biscuits.

Results

The SPSS v.17 was used to analyse quantitative data. There were 168 class four pupils who participated in the study, with 47% ($n = 79$) boys and 53% ($n = 89$) girls. Of the five participating schools, School A has 19.6% ($n = 33$) of the pupils, School B 16.1% ($n = 27$), School C 24.4% ($n = 41$), School D 25.6% ($n = 43$) and School E 14.3% ($n = 24$) of the pupils.

Most class four pupils who participated were 9 years of age 60.7% ($n = 102$). Pupils who were 10 years of age make-up 23.8% ($n = 40$), 8 years olds 12.5% ($n = 21$), 12 years old 1.8% ($n = 3$) and 11 year olds 1.2% ($n = 2$). Of the 168 class four pupils, 64.3% ($n = 108$) were iTaukei-Fijians,[1] 18.5% ($n = 31$) Indo-Fijians, 8.9% ($n = 15$) were Rotuman, Rabian and Part-Europeans, and the remaining 8.3% ($n = 14$) included Sri Lankan, Tongan, Tuvaluan, Solomon Islander, Chinese and Koreans.

A Kruskal–Wallis test was conducted with ‘Type of Activities’ as the independent variable and ‘Gender’ as the dependent variable. Males and females were found to significantly differ only on three types of activities, vigorous play χ^2 (d.f. = 1) = 12.89, $p < 0.0005$, fantasy play χ^2 (d.f. = 1) = 14.09, $p < 0.0005$ and conversation χ^2 (d.f. = 1) = 7.71, $p < 005$. ‘Vigorous play’ for males, mean 19.71 (SD = 37.11), displayed a significantly higher mean score on females, mean 3.31 (SD = 8.65). The mean for ‘Fantasy play’ for males, 15.56 (SD = 19.79) is higher than females 10.98 (SD = 24.22). For ‘conversation’, the mean for females 92.42 (SD = 91.65) is higher than for males 58.23 (SD = 66.95). Thus, it can be said that during recess, the significant difference between males and females was that males participated in ‘vigorous’ and ‘fantasy’ play more than females. On the other hand, females participated significantly more than males in ‘conversation’ during recess. The differences between boys and girls in the other nine types of activities were not statistically significant. In terms of the ‘Level of Social Interaction’, a descriptive analysis was performed. Overall, when combining all five schools for ‘Level of Social Interaction’, the mean for ‘social’ 284.43 (SD = 245.10) was far greater than the mean for ‘solitary’ 71.80 (SD = 45.53) and ‘parallel’ 51.56 (SD = 44.24). This indicates that children overwhelmingly interacted socially during school recess rather than being ‘solitary’ or ‘parallel’.

[1] *iTaukei*-Fijians are the indigenous people of Fiji. Indo-Fijians are descendants of Indians brought in by British colonial rulers between 1879 and 1916. Rotumans are Polynesians of an outlier island called Rotuma. Rabians were originally from Banaban Island in Kiribati, relocated to Fiji in 1945 to give way for phosphate mining.

Discussion

This study aimed to investigate the differences between the activities that girls and boys engage in during school recess in five Fijian primary schools. When gender was taken into account and compared, girls were involved in 'conversation' during recess, more than boys were. Boys, on the other hand, significantly engaged in 'vigorous' and 'fantasy' play more than girls did. The finding that boys participate in more vigorous play than girls did is congruent with what Ridgers and Stratton (2005) found in their study of English primary schools. Ridgers and Stratton found that girls are engaged in more conversation and sedentary play such as drawing and reading. This study found that the girls were significantly different from boys only in conversation but not in sedentary play. Moreover, Ridgers et al. (2005) similarly found boys participating in vigorous play such as running, rolling or doing cartwheels. However, a difference is that boys in this Fiji study are also engaged in fantasy play such as cops and robbers, doing karate, or being like the ninjas, more than girls did, while Ridgers and colleagues found boys in their context more into ball games. In fact, balls and sports equipment are not allowed during recess in a couple of the study's schools, and thus, boys may tend to find other forms of amusement other than involved ball games in the Fiji study. Allender (2011) also found in the Australian context, that high school males are far more active than females during recess. Thus, it seems that whether at the primary level or at the secondary school level, females consistently are less active during recess and lunch breaks compared to males (ibid).

This finding from the present Fijian study also indicates that boys may see recess as an opportunity to be involved in vigorous play and activity, while girls may see recess and break times as opportunities to socialise with friends. In the light of growing childhood obesity in Fiji schools, it is important that both genders are encouraged to be active during recess. The school recess is a prime opportunity for children to be physically active. The obesity levels of children in Fiji have more than doubled from 4.5% in 1993 to 13% in 2004 (Senilagakali 2006, p. 3). Recess play may be the only time children would be physically active, if the school does not implement physical education and school sport as part of the curriculum or regular offering.

However, Boulton (2005) warns that violating gender-related norms during recess can lead to negative reactions from peers, especially for boys. The construction of gender identity is a process to which parents, school, society, and the child all contribute. During recess, children are also active agents in making their social world, and through social interaction they make sense of and deal with concerns related to gender (Boyle et al. 2003). Dahmes (1993) found that gender is certainly a factor influencing behaviour during recess, as was age and race. In an intervention program in four primary schools in North Carolina, USA, in which they introduced 'recess packs', Elliot et al. (2011) found that it encouraged girls to be more physically active. The 'recess packs' caused increases in the physical activity levels of both sexes during recess, even though what they played was different. Boys played traditional team sports such as football and basketball while the girls engaged in activities such as jumping rope (ibid). Interventions, like the introduction of activity

packs, for example, are imperative to address identified needs in physical activity at schools. However, Starc and Strel (2012) advised that this needs to be implemented within the existing compulsory physical education program of the school, rather than as an isolated educational intervention that does not consider current resources, competencies and sustainability.

For the class teachers who observed their pupils during recess, there is new realisation and perspective in relation to their own school children. School E observer realised that observing children during recess gives her a totally new perspective on her school children. During normal supervision, a lot of details go unnoticed. In a structured observation exercise, children's creativity and richness in originality become appreciated and notable. The observation exercise has allowed the observers to better understand their own pupils from a different perspective than they did before. School B observer mentioned that:

> It has been a worthwhile experience that I have observed my pupils in the past few months. I have come to know my children very well and very close now … now I understand why my children do these things, why they are involved in these kinds of activities.

School B observer emphasised that it was an enriching experience to observe his own pupils. It is important in understanding why pupils participate in various activities. This supports class teachers in appreciating the amount of thinking, creativity and learning that goes into children's play and games during recess. Davis and Marley (2010) advise teachers to observe their pupils during recess. It is a great time for them to know their pupils more in a different environment. Davis and Marley advocate the notion that by getting to know one's pupils in varying settings, indoors and outdoors, teachers may be able to construct more developmentally appropriate lessons and contents that are sensitive to children's needs.

Santa (2007) argues that recess time is still classroom in the outdoors where children's innovations in creating games, stories and play thrive. Furthermore, there is a vital need to preserve recess, whereas contrarily in countries such as the USA and Australia, many schools are reducing or eliminating recess time, and thus underestimating the value of recess and breaks (ibid). Break times for the schools sampled in this study ranged from a total of 45 min to 85 min. Fiji's time for schools normally starts at 8 am and finishes at 3 pm, for a total of approximately 8 h at school for children. Only 45 min of break time during the 8 h is arguably insufficient. Even adults, by labour regulations, should have enough break time during the working day. School children must be given enough time for breaks during the day. It can amount to child abuse if children are put in the classroom for long hours without sufficient breaks. MacDonald (2012) agrees with this sentiment by saying that taking recess away from children could be called child abuse. MacDonald argues that the school system has overstepped its boundary and should return recess to children. Children's 'right to play' specified by the United Nations in 1989 must be defended in countries and communities (Zygmunt-Fillwalk and Billelo 2005). Recess bells should not be silenced or reduced. It fulfills children's need for novelty and supports learning (Chaille 2001; Dotterweich et al. 2012).

DiGiacinto and Jones (2010) recommended that schools need to organise intervention programs in order to provide a positive environment for recess play. In an intervention program, they implemented at a school in Virginia, USA, and they introduced a variety of playground equipment such as jump ropes, playground balls, frisbees, markings for tag games, basketball and football. This not only encouraged previously active children but importantly prompted less active pupils to become more active. DiGiacinto and Jones also innovated by giving each child a pedometer to track their steps. In addition, they displayed the map of the USA in the school hall where students could convert their steps into miles and track where they had reached in a walk around the country. Feda et al. (2012), in their study of 36 eight to twelve-year-old children, also found that introducing new playground toys and equipment of choice increased the physical activity levels of both boys and girls, but especially for females. Bundy et al. (2011) also reiterated the salience of playground-based interventions for school children in their 13-week intervention at a school in Sydney. They strongly advocated the need for an increase in outdoor free play to help curb childhood obesity.

Okely et al. (1998) suggested targeted intervention for adolescent girls at school, as they often are less physically active during school recess and lunch hours. Studying eight primary schools in North Carolina, Whitt-Glover et al. (2011) stated that intervention programs need to also provide understanding in creating policies that support classroom activity breaks and policy adherence. This requires school administrators and teachers that are enthusiastic about increasing their children's physical activity levels (ibid). Castelli and Ward (2012) also advocate having supervised recess physical activity in order to avoid bullying and misbehaviour. There are a number of recess and playground programs in the USA including Play On, Peaceful Playgrounds, and Girls on the Run (Castelli and Ward 2012) that aim to increase children's activity levels during the school day. Ren and Langhout (2010) also espouse the idea of supervised recess, as students often have concerns about fighting during recess and the need to mediate fights. In terms of an intervention, Ren and Langhout solicited the opinions of school children and used their ideas to intervene. Often, recess interventions are based on what adults think is good for pupils, which may not be suitable for varying contexts. Many such interventions tend to be individually focused and deficit-based, rather than regarding pupils as a resource for solutions. Recess intervention and interventions with children, in general, need to re-negotiate the perceived role of children so that it leads to greater levels of participation by children in decision-making and planning. Since recess is a time and space that belongs to children, it is only sensible to treat them as the ones with the greatest insights into their own experiences as well as holding the solutions to recess problems (Ren and Langhout 2010).

Even though findings were dependent upon the school and gender, children were found to be consistently engaged in one or another form of activity during recess and were very social. A finding from this study was that the main interaction seen across all schools during recess was that of being 'social' as opposed to being 'solitary' or simply 'parallel'. However, even if children are solitary or merely parallel at some stage of the recess, they often become social and involved later, as observed within

School D: 'I have noticed that a child could participate in two or more activities in this allocated 30 min per day and also those who were solitary most of the time had come out to participate in some activities with others'.

Children were always interactive during recess and in a variety of activities. This study indicates that children always have a form of play in which to be involved. Some of these play roles are active, while others are sedentary in nature. Recess is not an empty, free time. As Geiger (1996) stresses, recess is a space in which children express themselves and develop motor, cognitive and social skills through play. There is always a hive of activity with children engaged in a myriad of play and games. Kvalsund (2004) also finds that recesses are important arenas for social learning, in which children are engaged in informal learning through play and other interactions. School A observer recalls during a break time that, 'we have short coconut trees beside the ground, when I turned my back, they broke off the leaves and they were using it as aeroplanes. The ground was all covered with coconut leaves'. This quote highlights the creativity of children. A coconut leaf can turn into a plane in fantasy play. As such, even if it rains at School A and children are indoors, the level of creativity among children is visible when carefully observed. In one of these rainy days at School A, a couple of the children were lying down and had dozed to sleep. Meanwhile, a group of students did a paper-folding activity and tallied their marks. A mark was gained when one's folded paper created a noise. A Korean student taught another group how to fold paper birds and frogs. Then, there was another group of students making their own games using dice, while a group of girls were putting on make-up with make-believe materials. These, among others, all occurred in a single rainy recess period. Recess periods are always full of activities exhibiting children's creativity, innovation and learning expressed through play. School A observer states that:

> You think the 30 minutes is short but there's lots happening. The amount of activities they can do in that time span is amazing. You observe them doing this, the next minute are doing something else. They are just moving all the time.

Children's recess play and games are avenues for learning. Teri (1996) stresses that dramatic play which provides opportunity to imitate or role play during recess and contributes to cognitive and social development. There is an element of reality when children imitate what they have seen before through make-believe or fantasy. Teri also emphasises the importance of play to both social and cognitive developments. Play helps children cope with frustration. Play has its origins in emotions. It is a fallacy to think that stress is mostly a factor in adult life. Children also go through a lot of stress. One of the ways in which children cope with stress is through play (Teri 1996). In fantasy play, children improvise and live within the role as a person, animal or thing in a dream world, a space in which they move in and out, depending on their need and circumstances (Balke 1997).

Therefore, the recess must not be seen as a non-achievement context, because it is a context for learning. Stork (2005) likened play and games during recess as nutrition. Just as nutrition is vital to children's development, so is recess play. Waite-Stupiansky and Findlay (2001) see recess as the fourth 'R' because it helps in the

learning of the other three. In addition, Axtman (2006) stresses the importance of recess play to learning, just as multiplication tables are to math. These analogies reiterate the importance of recess to the child's development.

Conclusion

This study has implications for the school physical education policy to include the requirements of recess breaks that allow school children to be involved in play, games and activities in a safe environment. It found that in the five schools of class four children of Suva, Fiji, children are unsurprisingly very social, rather than being solitary or parallel. Children are extremely creative during recess. With an observant eye, like the research assistants did in this study, children's creativity in recess play and games becomes evident. When genders are compared, boys are significantly into 'vigorous play' and 'fantasy play' more than girls are, whereas girls are significantly into 'conversation' more than boys. The other variables were found to be statistically insignificant. This indicates that boys are more into vigorous types of activities than girls and also shows that girls see recess as an opportunity to socialise with their friends, while boys as a time to be involved in active play. The informal social experiences of pupils during school recess and break times should not be neglected. Recess is an important time for children to play, meet friends, develop social skills and be free from adult-controlled activities. Starting from the home to the school and back home again, children are being controlled by adults, but recess provides a time for them to negotiate their own activities in their own terms. They eventually develop a distinctive and vibrant culture and separate from classroom and home life. Recess goes beyond simply being a period to satisfy basic needs of eating, having a drink and visiting the toilet. It has benefits to children's development. Playtime is important and must be preserved. In fact, in the authors' language, one of Solomon Islands' 85 languages, recess is *'Jolo Sala'* which means '*going out to play*', so let us open the doors and allow children to play safely during recess. With it comes the laughter, the joy of discovery, fun and learning to live. Recess is not just a time that children 'hang out' but it importantly provides a venue for children to socialise, be active, interact, and a space to develop motor and social skills. As the old adage goes 'All work and no play makes Jack a dull boy'. Recess is music to children's ears, released from the confines of the classroom and the inherent control it represents, and to be free to run, to plan, to think, and dream.

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Chapter 9
Critical Reflection and the Question of Epistemology: Is Fiji "On the Ball"?

Eta Varani-Norton

Abstract The change from knowledge transmission of the Industrial Age to knowledge building of the twenty-first century clearly demarcates two different paradigms and the need to heed their implications. This transformation means that the educational system has to change from simply teaching or transmitting knowledge to a mode of creating and building knowledge. Learners have to be innovative in order to create new knowledge. Quality teaching and learning provide the roadmap to achieving this change. A crucial component of the needed transformation in teacher training is critical reflection. This chapter is based on a piece of small-scale qualitative research conducted on a class of 23 students studying a *Curriculum Development* course at a university in Fiji, with reflection exercises as an assessment component. The findings are discussed together with the results of previous studies conducted in Fiji and its region to gauge the quality of students' reflections. These studies claim that to teach critical reflection will be a challenge in classrooms because of our strong cultural and colonial influences. I argue that Fiji's colonial history and the traditional socialisation of the *iTaukei*, a name referred to indigenous Fijians, are strong factors in today's classroom culture and are partly an impediment to our engagement with the twenty-first-century paradigm shift. In this respect, Fiji's educational problem is comparable to other developing countries. The chapter discusses the history of Fiji's educational system and its link to the British educational system before defining "reflection" and its role in quality teaching and learning. The research on reflection as a form of assessment will then be examined. In conclusion, the chapter proposes reflection as an exercise and as part of quality assessment be taught to equip students for the purposes of knowledge creation.

Keywords Fiji · *iTaukei* · Critical reflection · Rote learning · Classroom culture

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Introduction

Since the introduction of literacy and numeracy by the Christian missionaries in the mid to late 1800s, and colonial government education policies in the second decade of the twentieth century, the surge in school enrolments has encouraged the government to focus on the quantitative expansion of formal education, at the expense of improving its quality. The Fiji colonial government, aside from its focus to increase the number of educational facilities, was also concerned to make education accessible to all and to close the disparity between indigenous Fijians and Indo-Fijians.

The colonial government did not take over the governing of Fiji's education until 1916, with an ad hoc approach to funding, teacher provision and infrastructure. In the 1920s, the tripartite system was introduced, which, although racially based, was an attempt to formulate and implement policies with consistency. Between 1940 and 1960, there was an expansion and gradual standardisation of secondary education. By 1979, there was an increasing demand for external examination qualification based on a narrow examination-oriented curriculum (Tavola 1991). In describing his village school, Nagonenicolo District School in Waimaro in 1929, the anthropologist Ravuvu observed that the introduction of Western education, come new values, was also the "*beginning of a new kind of dependence in relation to the socialisation of children*" (1988, p. 37).

By contrast, Tavola (1991) stated that the purpose of education for the Indo-Fijians was to achieve an English literacy that would open doors to white-collar jobs. Indigenous Fijians generally viewed schooling mainly as a new way of gaining respect (Ravuvu 1988). Colonial schooling inculcated "… new values and aspirations in which the acquisition of introduced knowledge and skills and of things European was considered prestigious and a mark of 'progress'" (Ravuvu 1988, p. 34).

While the Indo-Fijians were sure of what they wanted, the rank and file Indigenous Fijians were not explicit in their desire for a Western type of education and were more inclined to leave schooling for the sons of their chiefs. But both communities have long-valued European ideals very highly. Now the purpose of going to school is for both to get a Western type of education for a white-collar job (Tavola 1991, 2000; Ravuvu 1988; Hoar 2004). For *iTaukei* as for Indians, there is now a desire to adopt European ideals and be successful in modern life. Yet, this popular aspiration has had little influence in transforming the culture of the classroom (Coxon 2000; Tavola 1991).

Classroom Culture

An improved classroom culture is often associated with democratic values, the necessary nexus required for quality improvement in curriculum. Yet curriculum changes in the 1980s did not improve the quality of teaching and learning in Fiji (Tavola 1991). The new curriculum required a child-centred approach to encourage teachers

to come away from factual memorisation and recall, and to focus on an all-round development, upholding the child's dignity and ensuring that his or her creative potential is nurtured. The attempted reform failed because teachers lacked confidence and felt threatened by this new approach (Tavola 1991). They remained more comfortable with the established teacher-centred approach. The change also meant that teachers would have to put more emphasis on rote learning to prepare children for examinations. Despite the progressive aspect of the new curriculum, some of the old shortcomings remained.

Fiji's only female Education Minister to date, Taufa Vakatale, commented on the flaws of Fiji's education system that measures students' success only by their performance in examinations (Singh 1992). This has encouraged student learning by rote, cramming texts and coming out of the system not as fully developed independent young adults. With excessive emphasis on examinations there is inflexibility both in learning by the students and in teaching by the teachers. Whatever students are taught is narrow and fragmented, and they learn only what is covered in the curriculum. Teachers are unable to digress to subjects that have more relevance to students' lives, such as values, literature, drama and culture, when opportunities arise. Their objective is simply to cover the syllabus to prepare students for examinations.

The Fijian aspirations to be successful in Western education and the call to incorporate cultural values in the curriculum can create frictions that may be vexing, particularly for those who are more inclined to value Western education over tradition (Thaman 1993; Varani-Norton 2016). Moreover, the current push by the present government to embed universal values and global sentiments in our curriculum further compound the problem. The process of contextualising the school curriculum by adapting traditional or Western concepts or of creating new knowledge to improve learning and facilitate better understanding is not an easy one. The additional requirement to embed universal values makes the task ever more complex. These different forces can compete with one other and achieving these objectives may require a concerted effort from all stakeholders, including teacher educators, in-service and pre-service teachers in collaboration to achieve the best outcome.

The process of adopting and adapting Western knowledge and global values tends to clash with Fiji's hierarchical, paternalistic and authoritarian cultures, particularly the *iTaukei* culture. But the latter is a social reality that must be considered and problematised if knowledge adaptation and creation are to be achieved. A useful strategy to scrutinise, assess and filter this process is to critically reflect on the different factors and their influence, so that learners may arrive at what they perceive as the best outcome for the school, community and society.

Rote Learning and Schools of the Industrial Age

The emphasis on rote learning is not just a traditional pedagogy of *iTaukei* oral communication to teach through practice and imitation. It was reinforced by the British educational system of the industrial schools, imported by the missionaries.

Modern schooling and the professional training of teachers were the products of the rise of mass systems of education in many Western countries as a result of industrialisation and urbanisation (Simon 1983). By the twentieth century, however, there was a view worldwide that the industrial school "one-size-fits-all" model was failing to meet the needs of most students (Murphy 2016). The evolution of the world economy also meant that schooling was failing the Fijian society since the much-needed skill sets were not adequately provided.

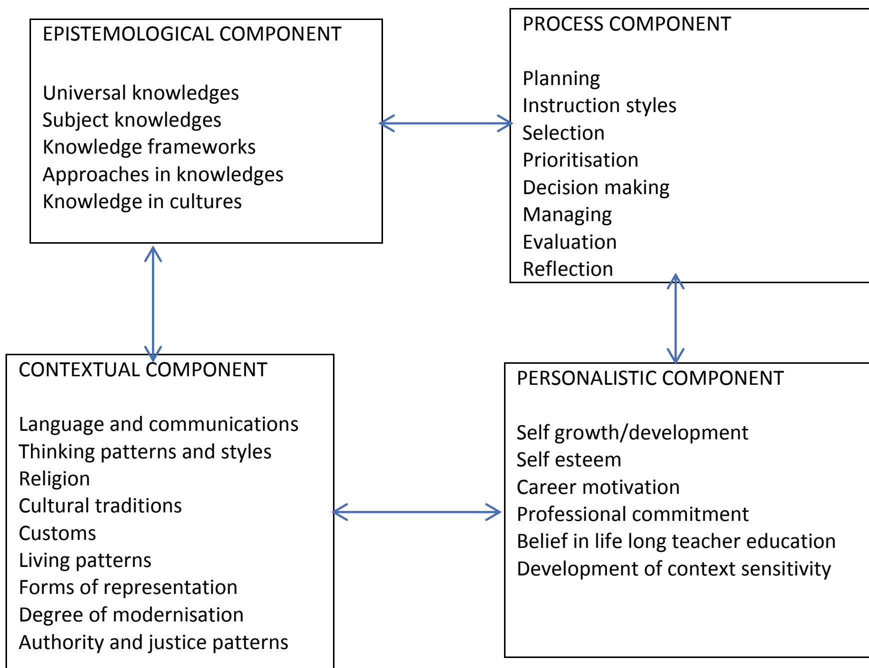
In Fiji, the rapid evolution from an isolated group of islands with rural subsistence to a more diversified and market-based cash economy, meant new knowledge and skills were required. The change also brought the need for social and political transformations. Today, with advanced technology that is rapidly changing many traditions into a global culture, this transition has radically changed the vision of the role of schooling (Kliebard 1995; World Bank 1995; Bacchus 2000). In concluding his report on education in Fiji, Bacchus (2000) asserted that the system will require strategies to enhance qualitative improvements in the nation's human resources. There must be a movement away from the examination-oriented curriculum into a more rounded approach in terms of epistemology and pedagogy. As Bacchus (2000) argues, teachers should not only view teaching as a technical task to ensure students pass their examinations, but also as their moral and social responsibility to prepare students not only to earn a living but also to make a contribution to enhance the quality of life in their families, their communities and the country as a whole.

Paradoxically, Fiji's current education system has a two-pronged effect: the Westernised examination-oriented curriculum leaves gaps in knowledge and skills amongst school leavers, and there is still a strong overlap with traditional socialisation that is authoritarian, hierarchical and paternalistic. While this twin effect persists in Fiji, the global pressure to make changes to accommodate twenty-first-century expectations is urgent. The push to change from knowledge transmission to knowledge creation is unavoidable. The change will furthermore involve the fundamental process of communication, cognition, memory and identity construction (Tuomi and Miller 2011). Learners learn to collaborate as they work together. Such exchange will involve learning each other's cultural knowledge and world views that will influence their understanding of each other, and this will provide the foundation for social life and knowledge creation. With modern technology in classrooms and the instantaneous accessibility of information on the World Wide Web, the community of learners becomes widened, their horizons broadened, and so their identity also has the potential to change. Basically, this means that in this complex environment of change, caution must be taken regarding the need for contextual realties to remain at the forefront of decision-making (Coxon 2000). Contextual realities differ from culture to culture, which has to be taken into consideration in creating or adapting new knowledge. Coxon (ibid) warned of a contextual reality that will clash with the much-needed change: that the authoritarian approach in Fiji to teaching and learning is an obstruction to building students' independent capacity for knowledge creation.

The role of critical reflection in this much-needed transition is to carefully examine the content of the curriculum, much of which is Western-oriented, and to determine how, in incorporating universal liberal values and cultural beliefs and attitudes, meld

to shape the content. This process requires close scrutiny, questioning, critiquing and filtering for a workable outcome. The process is likely to conflict with traditional *iTaukei* attitudes, and so may require tact to avoid what Tomlinson (2006, p.501) describes as "perils toward of taking a critical reflexive stance tradition". Tomlinson asserts that Nayacakalou's changes to the Native Land Trust Board, in the context of the *iTaukei* anxiety about rapid social change, were interpreted by indigenous Fijians as weakening the *iTaukei* society which resulted in a backlash and an assertion of "traditional Fijian rights". The dilemma for the teacher in this regard is to be mindful about cultural sensitivities while helping students keep an open mind about change.

Thomas's (1997) model for bridging old and new values for a culturally appropriate pedagogy emphasised four major components in the creation of knowledge: epistemology, process, context and personal:



A pedagogical component model (Thomas 1997, p. 17)

These components must be appraised in any attempt to make learning relevant to teachers and students. Thomas stresses that the components are strongly influenced by politics, economy, society, profession, research and culture. As a prerequisite to producing a culturally appropriate educational outcome, he argued that these factors must be assessed from the perspective of students' cultures. Claiming that this model will help bridge old and new values, he highlighted various strategies that can help achieve a melding. Reflection, as one of the strategies, will be addressed below. Another component in Thomas's model, "the personal", involves

self-reflection which is an inward approach and requires self-examination. Critical reflection, therefore, is not only outwardly but also inwardly oriented. Learners reflect cognitively on the knowledge content (on what is being studied) but also about why they think the way they think (metacognitive). In Brookfield's words, self-reflection involves, "challenging unquestioned assumptions, looking sceptically at givens we have lived by, and trying to shake off habitual ideas and behaviours so that we can try out alternatives" (1987, pp. 231–232).

Self-reflection should be viewed as an exercise that involves personal attributes such as attitudes, disposition, habits of mind and character traits (Auli et al. 2015). The process of examining old and new values for a culturally appropriate pedagogy may still be swayed by dominant values that will most likely influence learners' needs and desires and their learning of new ideas in the classroom (Kanu 2005).

Critical Reflections and Alternative Knowledge

Constructivism is a philosophy which argues that people actively construct knowledge by reflecting on their experience of the world they live in. In this process, they construct their own meanings or understandings. Legitimating their own knowledge, according to Akena (2012, p. 600), is "closely related to context, class affiliation, and the social identity of the [knowledge] producers". Thus, European colonisers who produced Western knowledge as legitimate, strongly influenced by ethnocentrism, imposed their knowledge and world view on their host society which gave them power and control to delegitimise alternatives such as indigenous knowledge. Akena (2012) maintains that the motive of knowledge producers is to legitimise, validate and impose such knowledge in the society in which they live. The subjugated alternatives, such as the existing indigenous knowledge, are often articulated as savage, superstitious and primitive. More likely than not, according to Breidlid (2013), the truth claims of objectivity and universality of Western knowledge are seldom interrogated by the recipient society. He acknowledges that modern science and technology are indispensable as essential aspects of modern contemporary societies. However, he stresses the importance of questioning the sweeping claims of Western knowledge superiority and emphasises the need to put its self-proclaimed superior position in perspective.

Auli et al. (2015) broadly define reflective thought as the process of looking back on assumptions and beliefs, while simultaneously, looking forward to the implications or consequences of the assumption or belief on the "action". They position this as an exercise in sustaining multiple elements and emotions in teaching. According to this approach, being reflective means, "expanding rather than narrowing the psychic, social and cultural fields of analysis" (Auli et al. 2015, p. 516). Mezirow similarly advocates that those engaged in such critical reflections must critique "the presupposition on which our beliefs have been built" (Mezirow, 1998, p. 1).

The chapter's discussion is based on Hatton and Smith's (1995) definition of critical reflection as a process that takes account of wider historic, cultural and political

values or beliefs in framing and reframing practical problems to which solutions are being sought. Such critical reflection is an exercise that examines multiple elements and emotions and their impact on pedagogy while considering how best to understand, and perhaps change, the teaching practice. It also considers the different factors which influence the culture of the classroom.

Why is reflection important in the knowledge creation process? All learning is based on experienced reflection. We reflect in order to achieve a specific outcome or purpose or to deal with complex issues. We reflect on something about which we already have some prior knowledge which is *often a* "process of re-organising knowledge and emotional orientations in order to achieve further insights" (Moon 2004, p. 82). However, incorporating reflection into teacher education in order to produce a reflective teacher, especially in non-Western cultures, is problematic, not just in its definitions but also in the process involved. Quite often, educational reforms and new ideas fail because the contextual factors were not taken into consideration when making the change (O'Donoghue 1994; Crossley 1983; Tabulawa 1997; 1998; 2009; Phan et al. 2010). Moreover, the different contexts and knowledge may also create gaps and conflicts. Kanu (2005) believes that contradictions and gaps that result from culture clashes create opportunities for critical reflection on culture and knowledge in postcolonial periods of transition. She further asserts that what is important in this exercise is to abandon the "… hegemonizing forms of knowledge that are rooted in Eurocentrism, in favour of dialogue with knowledges and identities which have been submerged or marginalised in the global power/knowledge relations" (Kanu, 2005, p. 512).

Background and Context of the Study

The present study was conducted in 2010 at a university in Fiji with a group of 23 students who studied a *Curriculum Development and Practice* unit. Sixteen of the 23 students in the study were in-service teachers, 90% with teaching experience between 2 and 10 years. As part of the unit, it was mandatory for the students to keep a journal and write a weekly reflection on their classroom practices. They could reflect on a particular "learning experience" during one day, or on the whole week's classroom experience, depending on whether the "meaning" of the experience has changed them in some way. Because this Bachelor of Education program and the unit were new, I began with the assumption that reflection in the teaching profession was unknown. However, this was corrected by the in-service students, many of whom assumed that their journal reflections would be based on the reflections they did during their pre-service training which was associated mainly with their teaching practice. They were not familiar with curriculum content reflections which involved "thinking outside the box", and this may have confused them. The objective of the journal writing was to gauge their level of reflection and metacognition. The result was expected to be a guide for revising reflective exercises in future units. There was no limit on word length for the written reflections, and it was hoped that the content would be sufficiently detailed to impress the assessor on the depth of reflection.

Method

Hatton and Smith (1995) outlined four strategies to obtain data on reflections: a written report; self-evaluations; a 7-min videotape of teaching; and a students' interview (in pairs), with the researcher using structured questions about the participants' evaluations. This study adopted the first strategy, a weekly written report, because this method had provided most evidence of reflections in the Hatton and Smith study. As part of the unit, students were given a marking rubric to help improve their reflections, guided by my comments. Journals were collected on the third and seventh week to monitor their reflections. My comments were included to point out areas that needed improvement.

Samples of reflective exercises (Moon 2004) and readings for students' guidance were discussed during the first two weeks of lectures and tutorials. Levels of reflective thinking were assessed using a framework that identified four types of writing: descriptive writing; descriptive reflection; dialogic reflection; and critical reflection (Hatton and Smith 1995). The criteria of marking the journal writing corresponded with the framework.

The first type, "descriptive writing" only reports an event. In the "descriptive reflection", there is an attempt to suggest reasons why such an event has occurred based on the student's personal judgement. "Dialogic reflection" is a form of discourse with one's self, an exploration on possible reasons (Hatton and Smith 1995). This involves the writer asking questions, using conversational language in trying to understand the problem at hand. Finally, "critical reflection" takes into account the historical, social, political contexts and reasons influencing the student's report.

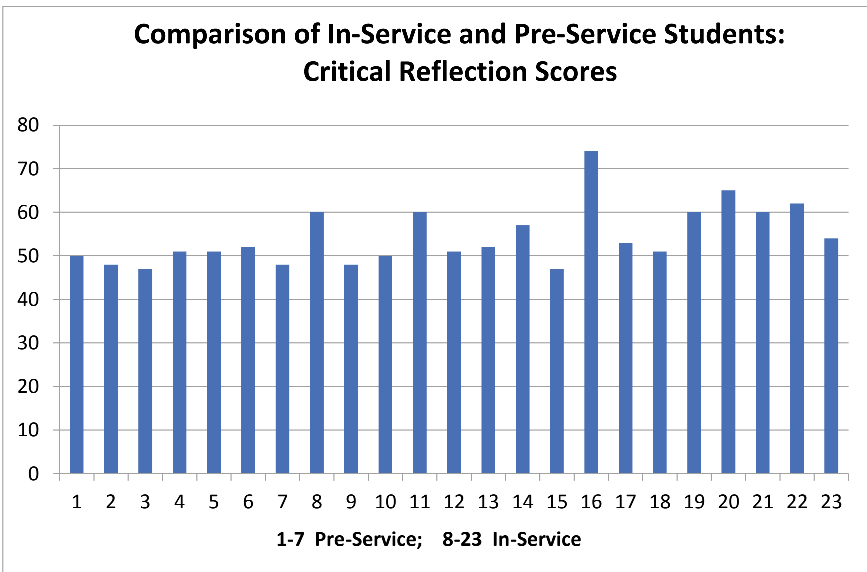
In week three, journals were read and comments were provided to help improve students' reflections because almost all had been at the descriptive level. There were more discussions during tutorials and lectures after the journals were returned. Journals were collected again in week seven to gauge the students' progress. The majority were still mainly descriptive in their writing. This prompted me to extract a paragraph from a student's journal and to present it to the group encouraging them to consider what questions the writer could have asked about the experience. They were challenged to question the political, social, and cultural aspects of the issue. Writing style was discussed together with other skills in critical reflection. At the end of the trimester, the journals were collected and graded.

Results

Of the 23 students who submitted their journals, 15 (65%) remained at "descriptive writing" level, 30% at "descriptive reflection" and 5% at "dialogic reflection". In total, 95% were therefore still at the superficial level. All seven pre-service students were borderline in their reflective skills, being mainly at the "descriptive writing"

level. Meanwhile, of the 16 in-service students, 94% were at the superficial level of reflective writing. 50% of the in-service teachers had made a slight improvement but were still largely at the level of descriptive reflection.

Dialogic reflection involves distancing oneself from the event, mulling over it, asking questions and exploring reasons. The language writing at this level is dialogic as a genre of reflective writing, which is unproblematic as long as it involves valid reflections (Hatton and Smith 1995).



An excerpt from a student's journal on his dialogic self-conversation illustrates his level of reflection:

> Do stakeholders really care about whether teachers are active thinkers or not? Do they really know what it means to say that iron sharpens iron? Do teachers know that they need to continually grow? I do not understand exactly how I am going to change some of the things that I do, but I can be sure that I may have to 'fine-tune' my philosophies and help my students rework theirs! (Indigenous Fijian, male).

This student recognises that much of what is around him is outside his control and he is still unsure on the approach required to make the necessary changes. He has become aware of factors outside his jurisdiction that are affecting his classroom performance, but his probing lacks critical depth. His focus on his teaching practice has not yet changed, although he acknowledges the need to change. What is lacking is an attempt to spell out his philosophy and why it needs changing. How will he achieve that in the classroom? On the basis of their own study, Hatton and Smith conclude that descriptive writing, "… is more easily mastered and utilised than either the exploratory 'dialogic' or demanding 'critical' forms, both of which require knowledge and experiential bases that take some time to develop" (Hatton and Smith 1995 p. 46).

The two most common types of reflection amongst the students in the present study were descriptive writing and descriptive reflection.

Besides the result discussed above, there are four other problems that Hatton and Smith (1995) outlined in their research that may have relevance to the present study. First is the novelty of reflection being associated with teaching and the likelihood of students viewing it as useless and irrelevant compared to the importance they assign to skills and content of teaching. This may also link to students' static concept of teaching and their resistance to making any change. Second is students' lack of time to think through their experience and develop a certain level of metacognitive skill to enable them to reflect. With Fiji Ministry of Education's national approach to implement changes at the school level, in-service teachers were inundated with demands. They were left with little time for preparation let alone for studies. It was no surprise that some weekly journals were not completed. Equally important is the additional problem of the absence of a knowledge base to help students understand concepts of reflection and apply them. The third problem is the feeling of vulnerability students may feel from exposing their perceptions and beliefs, and their weaknesses, that they may have uncovered during reflection. The fourth problem concerns the component parts, its structure and the ideology of the whole teacher education program which should incorporate reflection. A critical reflective approach should employ an ideology that is different from the traditional practices which have failed to illuminate the problematic nature of schooling.

Discussion

Findings of the present study showed little improvement in students' reflections over the course of the study despite the readings provided and discussions and activities during tutorials, and two interventions (at weeks 3 and 7). Huy's (2007) study at the University of the South Pacific on causal and mediating relations on reflective thinking, (amongst other things), arrived at three important findings: 1. the culture of silence and its potential influence on student's reflections; 2. an ignorance of reflective thinking practice; and 3. the absence of theoretical and practical discourse to help develop reflective thinking skills in learning.

These findings and those of my own study are consistent with studies or experiences in other developing countries in respect to problems in making reforms. For example, Tabulawa's 1998 study in Botswana found that teachers' classroom practices were influenced by their assumptions about the nature of knowledge, their view of students, and the goal of education and schooling. The classroom practice was teacher-centred and examination-oriented and emphasised mass teaching with little student interaction. Tabulawa posits that teachers' views of students reflected the Tswana culture that is rigidly authoritarian and paternalistic, encouraging a dependent mode of thinking (1998; see also Fuller and Synder on Botswana, 1991). He further argues that the classroom practice was heavily influenced, as in Fiji, by the

bureaucratic-authoritarian educational model of Britain, imported by the missionaries long ago (1997). Tabulawa later proposed (2009) that a critical role for teachers should be reflecting on their own teaching to problematise the taken-for-granted aspects of their work.

In South Africa, Harley et al. (2000) claimed that any change in the education system can be rejected by teachers due to their personal values and indifference to the cultures of others. Kanu's (1996) study found a strong similarity in Sierra Leone, and Pakistan whose people were socialised into the culture of their colonial masters and critical thinking was discouraged. In a rural school in India, Sriprakash (2010) studied the difficulty of making changes in an authoritarian system. In his study of developing reflective teachers as a major ingredient of a quality approach in Papua New Guinea, O'Donoghue (1994) found that lecturers' perceptions of students, their teacher-centred approach and the authoritarian culture of the society inhibited any change that could develop pre-service students into reflective teachers. To "transplant" educational knowledge, O'Donoghue (ibid) asserted that social realities must be taken into consideration in reforming programs or an education system.

Kanu (1996 p. 178) argues for a re-socialisation approach to education where students are "encouraged to carefully and critically examine the 'facts' and values they encounter and their taken-for-granted ways of looking at the world". For a programme of re-socialising in-service teachers in Pakistan, Kanu stresses three principles. These principles put teacher education at the centre of re-socialising teachers and students, who are both products of the country's socialisation process. The first principle involves teachers recognising the deficiency of the traditional system that sometimes conflicts with modern expectations, and the need to cultivate habits of social criticism, independent and critical thinking and questioning of realities. The second principle is for teachers to reappraise the outcome of the new learning and ensure that such knowledge is understood and interpreted into the wider social, political and economic spectrum. Third is for teachers to understand the psychology of the people, the ideologies they internalise that embed certain values, actions and traditions that have become second nature, to the point that they are not questioned. The key to this third principle is to come away from expository methods of teaching to engage in modes of questioning, probing and critiquing. Implicit in these principles is the use of critical reflection to guide teachers to "become reflective, critical inquirers who, through modelling, will eventually pass on the habits of critical inquiry to their students" (Kanu 1996, p. 178–79).

Within the Pacific context more specifically, Gegeo's (2001) response to Subramani's "The Oceanic Imaginary" articulates the need for Pacific Islanders to decolonise pedagogies because we are often caught in the "self-fulfilling prophesy" that outsiders have about Islanders as incapable of thinking critically and deeply about issues and have little to contribute based on their own cultural knowledge. Like Subramani, Gegeo agreed on the need to come away from visions projected by Anglo-Europeans but rather to work and adapt existing epistemologies, or to construct new ones. Both authors agreed on the importance of respecting cultural and gender diversity and creating labels that unite people. Importantly, as the present study

emphasises, close attention should focus on changing the educational system, especially teachers, who often resist change. Alcorn (2010) came up with six forms and stages of knowledge development in action research and reflections. She discusses the implementation of forms and stages in knowledge creation as participants of the School of Education, Solomon Islands College of Higher Education, worked collaboratively with participants from the University of Waikato, New Zealand. She found that knowledge generation occurred at all stages because the end product is contextualised, adapted or integrated.

The difficulty of participants in this study to engage in deep reflection, whether in the classroom or beyond, is an experience widely shared by cultures that are authoritarian, teacher-centred and examination-oriented. Fiji is a good example of this situation. There is an urgent need to incorporate critical, independent thinking and a self-critical stance in teacher training to help them become effective role models for their students.

Conclusion

The introduction of literacy and numeracy to Fiji by the missionaries in the mid-1800s ensured the grafting of the indigenous socialisation into the new British educational system. The graft was steeped in traditionalism, paternalism, authoritarianism and hierarchy. The grafting was very lop-sided as Western values were promoted as superior and were readily adopted by the local population at the expense of incorporating local knowledge as part of the curriculum. Indigenous knowledge, cultural values and practices were subjugated as irrelevant superstition. As a consequence, the development of education from colonial days to date has had a two-pronged effect: an examination-oriented curriculum that centres simply on knowledge transmission and rote learning, and a socialisation process that is authoritarian, paternalistic and hierarchical, the antithesis of the more democratic classroom culture that is essential for education in the twenty-first-century educational transformation. The re-socialisation of teachers is crucial for developing a culture of creativity and innovation, essential to learning for the twenty-first century. Especially crucial in the professional training of teachers today is the incorporation of critical reflection. Critical reflection helps teachers understand the construction of their pedagogical knowledge, its meanings and the contexts of its construction. Analysing the various forces that impinge on pedagogy is a prerequisite to either embed, adapt or create new knowledge. The process may involve knowledge (re)construction or adaptation, personal and professional growth and commitment. To make reflective teachers creators of new knowledge and practice and to ensure that these skills are passed down to their students, a course on critical reflection is now essential as part of teacher training. This study reinforces findings from other Third World countries that highlight the difficulty of teaching critical thinking in an authoritarian, teacher-centred and examination-oriented education culture. The findings in this study necessitate incorporating critical reflection as a crucial aspect of teacher training.

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Chapter 10
The Importance of Co-authorship and Disciplined Research

Jeremy Dorovolomo and Mesake Rawaikela Dakuidreketi

Abstract This study reviewed articles in a Pacific Islands Educational Journal from 1978 to 2005 in order to analyse the types of authorship and types of papers published. It was specifically interested in looking at the prevalence of co-authorship and in identifying the style of authorship and the research approaches taken. It was found that of the 362 authors, most of them are single authors at 75.7 and 24.3% were involved in co-authorship. In terms of the types of papers, 72.7% wrote essay or opinion papers, 17.7% wrote articles based on quantitative approaches, 7.7% wrote qualitative articles and 2.2% wrote articles using mixed method approaches. These findings have important implications for research and publication in higher education and research in and on the Pacific Islands, in terms of encouraging collaborative research among researchers and being out in the field to collect data to enable better evidence for education.

Keywords Pacific research · Co-authorship · Single authorship · Professional network · Publication productivity

Introduction

Researchers are expected to contribute knowledge to a specific field or fields. One reward of publishing papers in journals is the prestige it offers to the researcher while affording the opportunity to make advancements in their academic career. University faculties often consider publications in leading journals as the primary means to advance knowledge in a discipline. Articles are generally not considered scholarly unless they undergo rigorous peer review. It is worth noting that although refereed, scholarly journals are only one outlet for research dissemination, yet it is generally regarded the most important criterion for evaluating the researcher's productivity (Prozesky 2006). Yue et al. (2007) have also reinforced that journals are not the only means by which academic communities contribute to a knowledge base, but that

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they are a very strong means by which scholars compete for prestige and recognition today. Book chapter contributions are not given particular recognition in terms of prestige and promotions, compared to article authorship, especially in refereed journals (Rothman et al. 2003). Moreover, while books, presentations and grants are useful measures of publication productivity, refereed academic journals are perhaps the *sine qua non* of scholarship, representing the field's most current thoughts and critique of its established paradigms. This makes studies of journal publication important as they provide a useful barometer with which to gauge department excellence and productivity (Rachal and David 2005).

Method

This study examined an educational journal in the Pacific Islands from its inception in 1978 to the year 2005. Using hard copies from the library, it looked at factors such as whether articles were multi-authored or single-authored, and it identified the types of article published. In classifying the type of articles, the following factors were taken into account: whether they were opinion or essays (those which did not report on primary research where data is collected and analysed to conclude findings), qualitative, quantitative or of mixed method approaches. Only full articles were included. Excluded were book reviews, editorial announcements and advertisements of conferences. This study is an archival research and Das et al. (2018) stressed that it is a viable tool to utilise as a single or mixed method. Archival data could be census data, court proceedings, credit histories, annual reports, personal files and educational records, among other stored information. A main advantage of archival research is it can be done at low cost and data is often readily available (Das et al. 2018). In this study, archived issues of a Pacific Islands journal was analysed quantitatively for authorship and paper types. Das et al. (2018) also emphasised that the data can be potentially very rich and in particular if the data is for over years, as is the case with this study. Evans, McKemmish et al. (2015), however, expressed that archival gatekeepers have before denied individuals access to archival information involving abuse, data that may have authorities vindicated, or for other reasons, as archival information can be instruments of power and withholding justice for those who require information of historical exploitations (Evans et al. 2015). However, the aim of archival research is to understand the meaning and significance of the contents of the documents being studied (Duff et al. 2012).

Results

There were 362 authors of articles to this Pacific educational journal, of which 75.7% ($n = 274$) were single authors while 24.3% ($n = 88$) of the authors were involved in multi-authorship of papers. In terms of the types of paper being authored, 72.7% (n

= 263) of the authors wrote essay or opinion papers, 17.7% ($n = 64$) wrote articles based on quantitative research, 7.7% ($n = 27$) wrote articles based on qualitative research and 2.2% ($n = 8$) wrote papers based on mixed method approaches to research.

Discussion

This study found that single authorship was far more common than co-authorship on articles submitted to the journal within the timeframe studied. It was also found that essay and opinion papers were prevailingly more common than articles that were reporting on primary research that was either quantitative, qualitative and mixed methods in approaches.

Article Authorship

There are other characteristics of highly productive individuals, departments and universities in terms of research outputs. Consequently, to understand research productivity, assessing the organisational characteristics of higher education and its departments is imperative. This study finds about 76% of authors submitting articles to a Pacific Islands' journal are single authors, rather than co-authors. Rachal and David (2005) also found in their study of adult education journals between 1993 and 2002 that 76% of the articles were single-authored, 20% by two authors and 10% by three or more authors. While there may be nothing wrong with a high prevalence of single authorship, it could be argued that a greater uptake of collaboration in journal authoring would permit increased publication productivity. Fox and Mohapatra (2007), in their study of publication patterns among academic scientists, found that a significant predictor of productivity is academics doing multiple research projects simultaneously and often collaboratively with others. In addition, Aggarwal et al. (2006) studied top scholars in finance and revealed that there is increasing tendency to publish with co-authors and a concentration of these articles are found in the top five rated finance journals. For aspiring academics, this implies that there is need to establish a good professional network and to try to capitalise on the synergy of each other's expertise. Another characteristic of these top scholars is that they have had early career success in publication, and this seems to be a useful forecast of future quality and quantity of publications. These high-achieving scholars began publishing earlier and maintained high productivity over long periods. Publishing early and with persistence also play key roles, often in consistent venues of publication (Aggarwal et al. 2006).

In addition to being reputable, Cruz et al. (2006) emphasised that most of the research published by top authors in autism studies reported on collaborative work. These authors tended to work, not just publish, collaboratively and so are able to

have more time to devote to a greater number of projects and manuscripts than would have been possible if working alone. There is a relationship between productivity and collaboration, as most productive researchers tend to also have several co-authors on their papers (Cruz et al. 2006). In fact, the lone author seems to be diminishing now, with co-authorship trending upwards. Multidisciplinary research is increasingly essential in many fields and consequently, academics may not know enough to work and write alone across or incorporating multiple disciplines. Such co-authorship helps augment the productivity of staff, but with most journals not requiring information about who has done which part of the work, it may be necessary to put restrictions on the total number of authors to a particular article, especially if the number of authors is too high. If too many authors exist in a publication, it endangers the author credit system (Greene 2007).

The trend for co-authorship also occurs in other disciplines. For example, in social work, there are higher rates of multi-authored publications in recent years, as well as publishing in non-social work journals (Green and Baskind 2007). Stephen and Geel (2007) added that among scholars in the field of communications, single-authored articles have fallen significantly (Stephen and Geel 2007). In Australia, ninety per cent of research publications by Australian scientists have more than one author. Furthermore, more than a third of Australian research publications have an international co-author (Barlow 2006). On the other hand, Solodnikov (2008) noted that in Russia, high university teaching loads, in comparison to America, does not permit time for engaging in research, a situation which is exacerbated by inadequate pay and lecturers needing to take on supplementary jobs. In Russia, there is the predominance of individual articles rather than multi-authorship such as is common in the USA. This is occurring contrary to national stereotypes of ‘individualism’ in Americans and ‘collectivism’ in Russians (Solodnikov 2008). By the same token, while the Pacific Islands is viewed to be communal, publishers to the Pacific Islands journal show far more single work than multi-authorship. However, in countries where there are higher research outputs and stronger impact, such as Australia and the USA, there is an increase in co-authored papers.

It is not only collaboration within the Pacific, but research networking beyond the region that can usefully have positive impact. Smeby and Try (2005) in their study of Norway concluded that international collaboration impacted positively on the number of articles being published, more so than with domestic collaboration. One reason could be that the scientific community may see international collaboration as attractive partnership since internationally co-authored articles are cited more than single-country papers. Moreover, Allik (2008) found that international collaboration was a reason suggested for the recent increase and impact of Estonian research outputs. In a study comparing Estonia with other former Communist bloc countries over the span of eleven years from 1997 to 2007, it was found that papers published by Estonian scientists had the highest impact in comparison to Hungary, Latvia, Lithuania and Russia. Estonia’s research productivity still lags behind world leading research in developed countries, but for a country of 1500 actively publishing authors, this was remarkable. One reason attributed to this was Estonia’s diligence in co-authorship with colleagues from countries who are ahead in research intensity and

impact compared to the home country. They tend to collaborate more with Sweden, Finland, Germany and the USA (Allik 2008).

Sebestyan and Varga (2013) found that the quality of interregional knowledge networks depends on three factors. First is the level of knowledge accumulated by partners, termed the 'knowledge potential'. The second factor is 'local connectivity' which is the extent of collaboration among partners, while the third is 'global embeddedness' which entails the position of partners in the wider knowledge network. Regional production of new knowledge is important in which collaboration and networks are vital (Sebestyan and Varga 2013).

Types of Articles

In this study, most authors to the journal wrote opinion or essay papers rather than articles that report on research using qualitative, quantitative or mixed method approaches. It is taken into consideration that the type of papers published in a journal may depend on its approach. Ienciu and Matis (2012), who highlight this by commenting that type of research approach a particular journal has will influence what is published. If the journal is more into quantitative approaches, theoretical papers may have a low chance of being published. Some journals may emphasise the relevance of the article rather than the approaches (Ienciu and Matis 2012). However, a large number of papers published at the journal being studied contained a very high number of opinion papers rather than articles reporting on empirical studies. While opinion papers play a role in drawing attention to certain issues of concern, if overdone there is danger of contributing to a body of knowledge not founded on evidence. Empirical and disciplined research is very important in that it allows relevance and correctness. As Stanley (1991, p. 5) argues, without good educational research to inform judgements, 'superstition prevails'. Superstition here refers to times when decision-making, policy and practice are not based on researched evidence. When superstition prevails, a bandage could be put on the right arm when the left is the injured limb. When a bandage is put on the wrong arm it can be fatal, and as Rokicka (1999, p. 7) correctly states in developing countries, 'considering the scarcity of resources and the acuteness of the educational problems, the need for informed decision-making is an even more urgent matter'. The peculiarities of the Pacific region have to be taken into account during decision-making, and such disciplined inquiry will help exert a decisive influence on the quality, correctness and relevance of any planned programmes and activities. Disciplined research is pertinent to understanding and better serving a region made up of scattered, small and fragile Pacific Island countries.

Phelan (2000) stated that the foci of papers that are published by authors in Australian institutions have changed. A comparison of the foci of educational research in Australia between 1981 and 1987 against that of the period 1988 to 1995 showed that earlier research is more directly related to teaching issues, while the latter years' research focused on teaching in a more peripheral way. This does

not mean research into teaching practice in the 1988–1995 time period was not useful, but simply less direct to instructional practice. Research into educational policy issues, however, has increased in the later period (Phelan 2000). The types of research conducted by universities in Australia have also changed over time. There has been a decline in pure basic research and a move towards increased strategic research, possibly as a result of the commercialisation of research. There has also been increased focus on applied research while experimental research has remained constant in higher education (Burgio-Ficca 2001).

Conclusion

Writing for publication is a significant responsibility and it is something that academics must do, but it remains an activity that not all are engaged in. There is opportunity for academics to create avenues for collaboration, discussion and bringing colleagues together in productive ways. It is important to break the isolation from each other so that research experiences can be shared and so that academics can learn from ongoing conversations with the resulting confidence, rituals, habits and skills of being research active. Ultimately, increased Pacific research has the potential to impact on Pacific societies and its visibility, if its people are engaged in disciplined research in a myriad of topics and issues that affect Pacific people. Human knowledge increases substantially each year, and the Pacific Islands, importantly, need to know where it stands regarding innovation and to understand where it can compete by building not only local connectivity but also global networking and embeddedness.

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Chapter 11
Developing Numeracy Skills Using Technology-Enhanced Learning Activities in Fiji

Rajneel Totaram, Krishna Raghuwaiya, Irene Yee Chief, and Anjeela Jokhan

Abstract This chapter concerns one of the first studies to introduce technology-enhanced learning activities for teaching numeracy skills in Fiji. Year 1 students from a primary school were introduced to tablet-based interactive learning activities which were developed based on the Fiji Year 1 mathematics curriculum. In this study, the impact of using technology-enhanced learning activities for teaching numeracy skills was being investigated. A Learning Management System (LMS), Moodle, was used to create interactive learning activities based on the first two topics of the Fiji Year 1 mathematics curriculum. The two topics were numbers and measurement. An Android-based tablet device was allocated to each student for the duration of this study. Year 1 students in the participating school were required to attempt these interactive learning activities using tablet devices during their mathematics class. All students in the Year 1 class (n = 36) from the participating school were part of the study. There were 13 boys and 23 girls in the class. Results of this study show a promising impact of the technology-enhanced learning activities. Students performed better when they had higher interactions with the technology-enhanced learning activities. The success of this technology intervention paves the way for further research for technology integration in schools in Fiji.

Keywords Fiji · Technology-enhanced learning · Tablet-based interaction · Numeracy skills · Moodle

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Introduction

There is a need to strengthen numeracy skills of students in Fiji. Figures for the Literacy and Numeracy Assessment (LANA) for 2017 reveal a decline in the numeracy skills of students in Fiji. Only 17% of students in Year 5 and 22% of students in Year 7 met the proficiency level in numeracy in 2017 (MEHA 2017). In addition to this, the percentage of students at critical level in Year 7 increased from 2% in 2016 to 21% in 2017 (MEHA 2017).

Given the alarming state of numeracy skills of students in Fiji, an intervention at an early age is necessary. This study investigates whether the use of technology-enhanced learning activities for teaching numeracy in Year 1 can help improve student performance in numeracy in Fiji. The intention is that targeting students from their first year of school will help build a strong foundation in numeracy early on (Kumar 2018; Outhwaite et al. 2018; Pitchford 2015).

Technology in Education

Technology such as tablet devices and rich interactive multimedia has the potential to aid student learning. Five recent studies (Miller 2018; Outhwaite et al. 2017, 2018; Pitchford 2015; Schacter and Jo 2017) provide evidence of tablet-based mathematics apps significantly improving young children's mathematics achievement. Mobile and tablet devices are extremely popular in this day and age (Flewitt et al. 2015; Kabali et al. 2015; Kucirkova and Zuckerman 2017; Neumann and Neumann 2017; Radesky et al. 2015). In Fiji, the mobile subscriber penetration rate stood at 84% in 2018, and by 2025, Fiji's smartphone adoption will reach 72% (GSM Association, 2019). A Commonwealth of Learning report (Tamim et al. 2015) states that several countries around the world have embarked on large-scale government-supported initiatives to use tablet devices in the K-12 schooling sector.

Affordances of Technology in Education

Tablet devices are lightweight and are easy to hold and carry (Kucirkova 2014; Outhwaite et al. 2017). The touch-screen interface of tablet devices makes them intuitive for young users since it does not rely on dexterity-based motor skills (Falloon 2013; Kucirkova 2014; Miller 2018; Neumann and Neumann 2014). Gestures such as tap, swipe, and drag and drop are simple for users to learn and use (Falloon 2013; Miller 2018).

Rich multimedia allows content to the represented in multiple formats to suit different types of learners (Outhwaite et al. 2017). Learning can be interactive in which learners actively engage with the content (Falloon 2013). Interactive learning

activities can respond to actions of the learner, dynamically changing content based on learner input. Higher levels of active engagement have the potential to improve student attitudes towards studies and hence improve learning (Retalis et al. 2018). Technology can provide learners with digital scaffolds to aid their learning (Retalis et al. 2018).

A fundamental aspect for mastery of skills is to repeat or practise activities multiple times (Outhwaite et al. 2017; Pitchford 2015). Technology-enhanced learning activities such as tablet-based educational apps conveniently allow learners to re-attempt learning activities as often as they desire. Learning is further enhanced when immediate feedback is provided to the learners as they interact with the learning activities. Feedback is especially important for young learners to make them aware of their choices and to assist with their learning (Cantuni 2018; Falloon 2013).

Digital technologies generate huge amounts of data which can be recorded. In an educational setting, data on learner interactions with the learning activities means it is easy to keep track of students as they progress in their studies (Pitchford 2015; Schacter and Jo 2017). The data also enables teachers to identify students at risk so that early interventions to support these students can take place (Gašević et al. 2015; Jokhan et al. 2018).

Country Background

This study was based in Fiji, a small island nation in the South Pacific. The country comprises of over 300 islands and has a population of 884,887 according to the 2017 Population and Housing Census (Fiji Bureau of Statistics 2018). Only about a third of the islands are inhabited, with the two main islands—Viti Levu and Vanua Levu—making up about 87% of Fiji's land area (Kumar 2018).

Education in Fiji is centrally controlled and administered by the government through the Ministry of Education, Heritage and Arts (MEHA); however, majority of the schools in Fiji are owned and operated by religious and community-based organisations (Chandra et al. 2014; Crossley et al. 2017; Lingam et al. 2014).

Primary schooling covers Years 1–8 whilst secondary schooling is from Years 9–13. Children who are six years old at the start of the school year get enrolled in Year 1. School year in Fiji starts in January and ends in November.

Teaching in schools uses the traditional chalk and board approach and classes are centred around the class teacher. Some schools are starting to make use of digital technologies in the classroom, but the blackboard still remains the centrepiece of most classrooms.

Research Design

This study was implemented in a primary school in Nausori, about 25 km from Suva, the capital of Fiji. A design-based research (DBR) methodology was adopted since the naturalistic setting of the classroom environment and context were important elements of the design being evaluated. Prior to commencing this study, approval was obtained from the Education Ministry in Fiji and parental consent was also sought from parents of the Year 1 students. The Year 1 teacher participating in this study had over 25 years of teaching experience, but was not very technology-savvy.

Prior to using the tablet-based activities in the class, a short training session was conducted for the participating Year 1 teacher. In this introductory session, the researcher demonstrated how to operate the tablet device, including how to access the interactive learning activities by logging into the Moodle site. The researcher also explained the design of the learning activities and the topics covered.

To ensure that the students only use the tablet devices for learning mathematics, all apps and features of the device were locked, except the Google Chrome web browser app. The Google Chrome app was used for accessing the Moodle site.

When the tablets were first used in class, the researchers were present to assist the class teacher with any technical issues. However, after this first session, the class teacher conducted both the standard teaching and technology intervention on her own.

Since this was a pilot study, the tablet-based interactive activities were used as supplementary learning resources. This meant that the Year 1 students were taught mathematics in the standard teacher-led sessions during some mathematics sessions. During other mathematics sessions, the Year 1 students used their tablet devices to attempt the interactive learning activities under the supervision of their teacher. For this study, students underwent standard mathematics teaching and technology intervention during the normal mathematics class times; no extra time was allocated for attempting the tablet-based interactive activities. Students used the tablet-based learning activities over a period of 8 weeks during Term 2, 2018. On average they had the chance to use the technology-enhanced learning activities for 2–3 times a week.

Technology-Enhanced Interactive Activities

A total of 41 interactive activities were created using the book and quiz modules of Moodle. All activities were designed by the researcher using the "2017 Year 1 Mathematics Activity" book and the "Maths Guide for Lower Primary—Years 1 and 2" as guiding documents. Since the duration of this pilot study was only till the end of the second term, only the first two topics of the Year 1 mathematics curriculum

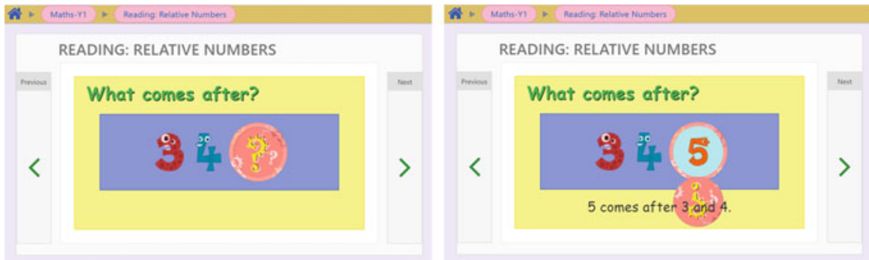

Fig. 11.1 Screenshots of an interactive reading activity

Fig. 11.2 Screenshots of quiz questions

were covered. The interactive activities created covered the concepts of pre-numbers, whole numbers, counting, order of numbers, addition, subtraction, length, weight and time.

Colourful images, simple animations and drag and drop touch interface were the dominant elements used so that the interactive activities created were suitable for young students. Figure 11.1 shows screenshots from an interactive reading activity on relative numbers. Learner knowledge and understanding were tested using the quizzes. Moodle's quiz module allowed for automated marking and provided immediate feedback to the students as they attempted the quiz activities. Screenshots of some quiz questions are shown in Fig. 11.2. Students could attempt all activities multiple times which helped reinforce the knowledge they learnt.

Data Collection and Analysis

For pre-test data, the students' Term 1 mathematics exam results were collected from the school. This was a paper-based internal assessment created by the Year 1 class teacher. This test covered content that the students had learned in Term 1. Year 1 students attempted this pre-test prior to starting the technology intervention.

At the end of the technology intervention period, the students attempted two researcher-created paper-based post-tests. Both post-tests covered the same topics and had similar question types. The only difference was that the Post-test 1 had questions directly picked from the interactive learning activities whist Post-test 2 had questions which the students had not seen before. The purpose for having Post-test 1 was to test if students could recall what they learnt whilst attempting the tablet-based learning activities. Post-test 2 served to test the knowledge retention and understanding of the students. Figure 11.3 shows a question taken from Post-test 1, whilst Fig. 11.4 shows a question from Post-test 2.

During the technology intervention period, as the students were attempting the interactive learning activities on Moodle, all interactions were automatically recorded. This included the activities the students attempted, the scores they received and the number of attempts students made for each interactive activity. This student interaction data was exported from Moodle into an electronic spreadsheet. Likewise, students for the pre-test and post-tests were also recorded in an electronic spreadsheet.

A short teacher interview was also conducted at the end of this study to allow the teacher to reflect on her experience and observations when technology was used in the classroom.

To analyse the impact of the technology-enhanced learning activities on student performance in numeracy, the means of the post-tests between the students who attempted higher number of interactive activities was compared to those who attempted fewer number of interactive activities. Students with higher number of activity attempts were labelled as "high use" group whilst the others formed part of the "low use" group. Statistical analysis software, SPSS, was used for the quantitative analysis.

This study employed nonparametric tests for statistical analysis since the sample size was small and the data was not normally distributed. The Mann–Whitney U

Fig. 11.3 A question taken from post-test 1

Fig. 11.4 A question taken from post-test 2

and Wilcoxon signed-rank tests were conducted for testing for changes in mean performance of students. To identify if there was any relationship between the number of interactive activities attempted and student performance, the Spearman test was used.

Results and Findings

Student Interactions

Data from Moodle usage logs shows that students got the opportunity to use the technology-enhanced interactive activities for only 12 days over an 8-week period. In spite of this, a lot of student interaction was recorded on Moodle. Over 37,000 log entries were created in just 12 days of use. Between the 34 students who attempted the interactive activities on Moodle, 592 quiz attempts were made. Whilst all activities could be attempted multiple times, quiz attempts outnumber the reading activity attempts. Each quiz attempt randomly picked questions from a large pool of questions, so students always got a fresh set of questions. Two students did not complete any of the 41 interactive activities which were created. Table 11.1 shows a summary of the interaction data recoded on Moodle.

Measure of Student Performance

At the start of the intervention period, there was no significant difference between the means of the pre-test of the "high use" and "low use" groups (Pre-test: $U = 124.0$, $p = 0.342$). This meant that both groups were comparable before the intervention.

Table 11.1 Interaction data extracted from Moodle

	Count
Class roll	36
Male	13
Female	23
Students who used tablets	34
Days of tablet use	12
Total quiz attempts by students	592
Count of readings attempted	270
Count of quiz attempted	227
Count of all activities attempted	497
Log entries count	37,229

After using the tablet-based interactive activities for 12 days, significant differences were observed in the means of the post-tests (Post-test 1: U = 55.0, p = 0.016; Post-test 2: U = 68.0, p = 0.040). Students who attempted higher number of tablet-based interactive activities performed better than students who attempted fewer number of activities.

Spearman correlation coefficient indicates that there is moderate, positive correlation between tablet-based interactive activity attempts and student performance in the post-tests. The correlation was stronger for Post-test 1 which contained questions that were directly taken from the tablet-based interactive activities compared to Post-test 2. For both the post-tests, the correlation was significant (Post-test 1: $r_s = +0.544, p = 0.001$; Post-test 2: $r_s = +0.496, p = 0.003$).

Discussion

Improving Numeracy Skills

This study revealed that there is potential for using technology in Year 1 to improve numeracy skills. Statistical analysis provided evidence that students who attempted more tablet-based interactive activities generally performed better in the post-tests than students who attempted fewer activities.

Whilst the results demonstrate that technology-enhanced interactive activities have positive effects on students' numeracy skills, a longer technology intervention period is warranted. Students in this study only had the opportunity to make use of the tablet-based interactive activities for 12 days and the use of these technology-enhanced learning activities was not on a regular basis. A consistent use over a longer duration will provide more concrete evidence of the impact that the technology-enhanced learning activities can have on numeracy skills of the students.

Technology Use in Year 1 Numeracy

In the short duration that students had to make use of the tablet-based activities, they managed to generate a lot of interaction and engagement with the learning activities. Students attempted several activities multiple times because the technology easily allowed this to happen. The teacher said that "…students could follow and complete the activities on their own". When asked to describe how the students felt when using the tablet devices for learning, the teacher responded with a smile on her face, " excited".

There is evidence in this study that when the use of technology is guided by pedagogy and is based on the classroom curriculum, then positive results can be achieved. Tablet devices and Moodle LMS were successfully used for teaching numeracy skills

in a Year 1 classroom in Fiji. This was achieved by using a simple, consistent layout throughout and making use of only two Moodle modules—book and quiz. A custom-designed theme, especially targeted towards young children, was also instrumental in making Moodle child-friendly and simple to use.

Conclusion/Recommendations

This study is one of the first in its approach at introducing technology in primary schools in Fiji. Through the use of an LMS and specifically developed interactive learning activities based on the national curriculum, this study shows that technology-enhanced learning activities can have a positive impact on student learning. A further study with a longer technology intervention period may provide validation of the preliminary findings of this study.

This study also sets the foundation for technology integration in other subject areas and the later years of school. The lesson learnt from this study will be highly relevant when integrating technology in the other classes in Fiji.

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Chapter 12
Leading in Early Childhood Education Centres in the Solomon Islands: Issues and Challenges

Billy Fito'o

Abstract This chapter explores the perception of head teachers and Early Childhood Education (ECE) Centre supervisors on the role of supervisors in leading ECE centres in Solomon Islands. It explores issues of policy emerging from the National ECE policy of the Solomon Islands pertaining to the power that ECE supervisors have to perform their duty, and their ability to set direction and control financial resource for the centre. The study was conducted with three head teachers and three ECE supervisors from five different schools in urban, semi-urban and rural settings using one-to-one interviews. The study reveals that the quality of service delivered in ECE is weak because of the limited power that supervisors have to perform their duty as overall decision-makers of ECE centres. This has affected their role as leaders, impeding their ability to direct the improvement of ECE centres and has restricted their ability to plan and collaborate with stakeholders in order to generate resources for sustaining the operation of centres. The way forward for Solomon Islands, according to this study, is to strengthen and empower supervisors' leadership responsibilities through regulation via job description improvements under the National ECE policy and with the Teaching Service Handbook.

Keywords Solomon Islands · ECE policy · School leadership · School supervision · Pidgin

Introduction

There is broad and wide recognition of early childhood experiences as critical to a child's development and change of life (Coleman et al. 2015). It is a period that marks rapid changes to the physical, cognitive, linguistic social and emotional development (National Scientific Council on Developing a child (NSCDC 2007). Research in developed countries on Early Childhood Education (ECE) has shown a significant correlation between the quality of provision and the leadership of early years

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settings (Ang 2011). The period in early years of the child may set pathways in health, learning and behaviours that can last throughout their lives (NSCDC 2007). It has been empirically proven that the role of early year leaders can create effective preschool settings for effective learning (NSCDC 2007).

In developing countries, in the Pacific, recent studies have found that not much is done within the area of school leadership to better prepare those in leadership roles to take up their moral purpose of leading (Lingam and Lingam 2014). In Melanesian countries, and particularly the Solomon Islands, the area of ECE leadership is particularly lacking (MEHRD 2017). Despite the formulation of a national policy on ECE, little has been done to improve the governance and implementation of the policy nor in support of leadership at the early stage of student learning, and this is increasingly becoming a problematic issue.

In the Solomon Islands, leadership at the ECE level is either provided by the Board of Management for detached (separately operated) centres or rests with the Head or Principal for attached (where the ECE centre is attached to primary school) centres. The supervisors charged with the responsibility of leading ECE centres, as stipulated in the ECE policy, are responsible only to the head teacher or Board of Management. Supervisors are restricted to the areas of managing timetables for teaching and learning and must act only on the advice of head teachers on matters concerning supervision and classroom instruction. Simply put, the role of ECE leaders is generally to manage curriculum and pedagogy with relatively minimal power to make decisions for change and future developments. This differs from the notion of leadership which involves decision making that is expected to drive a school organisation forward. The expected attribute of leadership, which should be measured according to transformational (for change, vision & goal setting), organisational (cooperation, collaboration, teamwork) and instructional (improvement in pedagogy & curriculum) domains is missing from the leadership profile of ECE centres in the Solomon Islands. This raises important questions regarding the leadership of ECE centres, in particular, questions concerning whose interest the current configuration serves and the intended purpose of the ECE centre leadership role.

This chapter explores the perception of ECE supervisors and head teachers on the issues in leading in ECE centres in the Solomon Islands. It seeks to explore the supervisor's role in leading ECE centres, the authority and power they have to make decisions on matters of leading and managing school affairs and the issue of setting direction and financial control. The study focuses only on the perceptions of ECE supervisors and headmasters to answer the question regarding the power they have under their job descriptions to lead, manage and make decisions as provided for in the Teaching Service Handbook and the ECE National Policy. Whether the power to execute their role as ECE leaders is enough to progressively advance ECE centres or the limited power they have can be a limitation to ECE development and delivery.

Background

This study is motivated by the fact that despite the importance of ECE, there has, to date, been relatively little consideration given to the leadership of children's centres in the Solomon Islands.

Early Childhood Education was introduced in the Solomon Islands in 1981 as an outcome from a recommendation made in the Bugotu-led Education Review 1973 (Glasgow 2014; Nanau 2018). The number of schools from the establishment of the ECE sector until 2011 has grown to 482, with a total of 22,817 enrolled students (ibid). However, it is only afforded 2.2% of the total education budget, despite having the second highest number of schools as a subsector of educational provision. The primary school subsector, with a number of 523 schools, holds 42.2% of the budget while the secondary school subsector, with 177 schools, holds 32% of the budget allocation for education (Nanau 2018).

The ratio for student teacher allocation in ECE is 17 students per teacher (Nanau 2018). The pupil/teacher ratio for trained teacher allocation for ECE is 50.1% and for untrained teacher is 29.3 if analysed against the total workforce of ECE teachers. However, according to the 2005 policy report, 80% of ECE teachers were unqualified (Ministry of Education National Early Childhood Education Policy 2008). Furthermore, those that are referred to as 'qualified' were those who obtained some field training, and not teacher training from recognised teacher training providers, as required by the policy. 'Teachers who have completed field-based training are technically classified as "unqualified" and need to complete the ECE teacher training programme at SICHE in order to qualify as a trained ECE teacher' (ECE Policy Statement 2008, p. 45).

In terms of managing the ECE centres, under the ECE policy and the Solomon Islands Teaching Service Handbook, recognition was given to School Boards of Management (BOM), while for ECE detached schools the head teacher is responsible to administer and manage the school (Policy Statement 2008, National Teaching Service Handbook 2011). As stipulated in the Teaching Service Handbook:

> The general tasks of the ECE-centre management committee in collaboration with the centre teaching staff will include; to produce a three ECE-centre development plan and budget in the MEHRD-format and to support the development, maintenance and daily management of the ECE-centre by the Head teacher (if available) and teacher(s). (ECE Policy Statement 2008 p. 47)

The supervisor of the ECE, however, has as part of the job description the responsibility to cater for leading and managing, with head teachers or BOM having ultimate responsibility for final decisions. According to records from the ECE Policy Statement, only 17% of the ECE teachers in the community-based settings are considered qualified and are paid by the Solomon Islands Government (ECE Policy Statement 2008). The rest were paid by their communities, private providers or Education Authorities, according to their financial affordability (ECE Policy Statement 2008).

The supervisor's role, as stipulated under the Teaching Service Handbook and the ECE policy, includes resource management, setting short- and long-term goals,

ensuring that ECE curriculum is play-based, facilitation of and attendance at workshops and also arranging workshops. It also includes the establishment of effective systems for smooth communication and completion of SIEMIS and financial reports to the Education Authority. It further includes: management and uses of ECE centre facilities; supervision of the maintenance of such facilities to ensure a clean, providing an orderly and safe environment for students to live play and learn, holding regular meetings with staff on expectations of staff performance with regard to instructional strategies, classroom management and communication with the public (National ECE policy 2008).

Literature

The school leader is like a taxi driver who has the responsibility to deliver the members of the school to their destination or goal (Graham 2007). They have the role of developing schools through offering leadership guidance and direction, intellectual stimulus and providing individual support to teachers to generate effective learning (Mistry and Sood 2012). They establish a clear vision for their setting, linked to the core purpose for children's learning and contextualise and align the goals with local needs (ibid). The responsibility of leaders is to initiate and set direction towards what schools are trying to achieve and proactively tackle the specific challenges affecting local parents and guardians who send children to school (Mistry and Sood 2012). They are entrusted to set visions, communicate verbally and model through their day-to-day leadership practice (Ang 2011) and to protect the children under their care and plan for solutions to rectify situations if needs arise (Duignan 2006).

In demonstrating higher-performance expectation, school leaders must have power to build visions, set directions and engage members of the school organisation so that the organisational goals have motivational values at both the micro-level (individual) and meso-level (school) (Day et al. 2011). Studies on school leadership claim that leaders cannot effectively practice their role without the possibility of exercising some power (Graham 2007). Furthermore, research on leadership found that leadership that is constrained to the classroom and supervision of what happens in the classroom appears to have less effect on students (Day et al. 2011). Contrary to this, leaders who create stability, strengthen infrastructure and provide timely feedback on teachers' work have a significant impact on classroom learning (ibid). This means that leaders whose role is to pursue a moral purpose need to have the authority to do so, despite associated tensions (Graham 2007).

Busher (2006), stresses that the leader's responsibility is to create a collaborative learning community by redesigning the organisation as they are the ones that make decisions on matters that reflect the interest of the majority of the people. In an institution where leaders have no power to determine the progress, how can they decide what is best for their intuitions? In such cases, leaders must have the power to operate and lead the system in the institution by methods such as maintaining its current process, its current distribution of power and its existing culture (Busher

2006). It has been found that limiting the role of leaders only to classroom teaching may affect children's learning (Mistry and Sood 2012; Ang 2011). A study on ECE leaders also recognised that early years settings are dynamic organisations that are changing and evolving, and that the role and practice of its leaders need to be simultaneously adjusted and enhanced in response to these changes (Rodd 2006). However, such a leadership role can only be effective when leaders have the authority that is recognised to make decisions for the institution.

A study on leaders in the early years of children's learning suggested that empowering ECE school leaders to make decisions on the early years of the child's development will change the whole of their future life (Mistry and Sood 2012). The same study also found that children who left ECE school still have positive behaviours and benefits even after two years (ibid). There is wide recognition that leadership in the early years of learning centres should also adhere to meeting the needs of the most disadvantaged children (National College for Leadership of Schools and Children's Services 2011). It also acknowledged the strong body of evidence that demonstrates the relationship between leadership and the provision of effective services in early childhood settings (Vandall and Wolfe 2000 cited in Coleman et al. 2015).

Ang (2011) found that effective leaders are those that established a clear vision for their setting, linked to the core purpose for children's centres but contextualised the in relation to local needs. They believed strongly in what they were trying to achieve and proactively tackled the specific challenges affecting local families. The vision has to be communicated verbally and modelled through their day-to-day leadership practice. This indicated that leadership requires strategic alignment to intention, and this involves people wisdom, a contextual wisdom, and a procedural wisdom (Leithwood and Jantzi 2005). That is the core of leadership and is referred to as transformational leadership where an experienced leader develops a person by offering intellectual stimulus and providing individual support to teachers and other school stakeholders and leads them towards a common goal (ibid). In transformational leadership situations, leaders have confidence in their practitioners' ability to engage in quality practice (Ang 2011) as they are mediators of the social and curriculum context of schools for staffs, students and parents (Busher 2006). An example of this is when a leader demonstrates her vision by prioritising the children and families in the most deprived areas of her/his community and advises the staff to focus on reaching these particular children and families (Leithwood and Jantzi 2005). When everyone buys into that shared vision and understanding, and when they are clear and focused and taking ownership of what their role is, they will take risks, and they will be creative with reaching those outcomes for families and children (ibid). The important aspect of this is to have a clear vision to improve outcomes for children and families.

Early Childhood Education is the starting point of a child's educational journey that would establish a strong learning foundation for children and also develop in children the ability to be strong and confident learners (Glasgow and Rameka 2016). However, in the Solomon Islands, not much is done on this level of education. In 2017, there was a moratorium sent to all education providers to freeze registration of new ECE centres and to also freeze recruitment (Ministry of Education Human Resources Development 2017).

A new study on about ECE in Pacific island countries, including Solomon Islands, has indicated that many developing countries are faced with multiple challenges in the implementation of ECE national policies and programmes (Research on the early childhood care and education services in the Solomon Islands 2018).

In the Solomon Islands, ECE supervisors are either not empowered because of limited power to lead as described in the ECE policy, they have limited knowledge about ECE affairs as head teachers whose expertise is only on teacher primary, or they remain outside of the system as the Board of Management who does not know about ECE. The role of a leader is very important and is the key constituent in achieving organisational improvement (Kanyal 2014). However, this was not recognised in the ECE policy.

Methodology

The study reported in this chapter was qualitative and founded on a set of interpretive material practices (Denzin and Lincoln 2008). The interpretive paradigm was considered necessary for this study as ECE leadership can be examined in rich detail, and research on such phenomenon can evolve during the study and not prior to the study (Ary et al. 2006). This study of ECE leadership was approached inductively, to generate the theory, therefore the tools used include face-to-face interaction. The significance of this is that the researcher studies things in their natural settings with ECE supervisors to make sense of or interpret ECE leadership responsibilities from the meaning participants (supervisors, head teachers and chairperson) bring with them (Denzin and Lincoln 2008).

Methods

The study used one-to-one semi-structured questions (Bogdan and Biklen 2007) with six participants, including three headmasters and three ECE supervisors. The participants of the study were purposefully selected from ECE centres in Honiara city and Malaita Province. The selected schools were chosen to provide a blend of schools from urban, semi-urban and rural settings. The features identified of the school were expected to inform the study through thorough comparative analyses of information acquired from participants.

All interviews were recorded and transcribed by the researcher from Pidjin English (a borrowed national language or *lingua franca* made from a variety of languages including English) to English. The scripts were analysed using a coding system that sets signposts and indexes that represent the data (Barbour 2008). The codes were then applied according to themes as guided by the questions: To what extent are supervisors successful in leading ECE schools? To what extent is the supervisor's role being recognised by school stakeholders?

The study used preliminary and post-data analyses to validate the data. Preliminary data analysis involved checking and tracking of the data from the information collected (Grbich 2007). The importance of this preliminary analysis is to highlight and identify emerging issues of importance for the study. Also, in the preliminary analysis, the researcher went through the interview recordings soon after the interviews were completed. This was done to confirm the validity of the information. For the post-analyses, the reduction of data was more involved. The data were then processed in the analysis using a coding process.

Study Findings

These findings reported here demonstrate the perceptions of primary head teachers who control and administer ECE and who are responsible for the administration of ECE centres that are attached to primary schools or community high schools, supervisors of ECE centres, Education Authorities that administer schools and privately own ECE centres.

Policy Issues and Challenges

The ECE policy of the Solomon Islands created and regulated with high expectation for control, planning and delivery of ECE service. In this legislative provision, leadership and control of ECE centres were regulated under the responsibility of head teacher or principal for attached schools and Board of Management for detached schools. This was affirmed by a head teacher who declared:

> I made decision, do planning, directing school towards goals, build relationship with community, Collaboration with board, Ministry of Education, Education authority on issues of teachers and students, I am also responsible for delegation responsibility to teachers to support in administrative responsibilities, Supervision programmes and make decision on what activities needed to be done and making decisions on assessment teachers performance and students' academic results pertaining all teacher including ECE teachers.

The head teacher 2 and head teacher 3 mention these comments when interviewed:

> My role as the headmaster is the overall leader of the primary school that mainly deal with the general administration of the school. I am responsible for deciding on all affairs that affect learning.
>
> My role is to lead the school in every way. I engage mostly in the general administration of the school. I manage the staffs, resources, curriculum and students with the help of the staffs. This include deciding on what is best for the school.

The perception of leadership practices as noted above are consistent with the Solomon Islands National ECE Policy Statement 2008 and the Teaching Service Handbook 2011 (Solomon Islands Teaching Service Handbook 2011). The issue

here is that supervisors who led the institutions and whom under their responsibility as described according to the National Teaching Service Handbook 2011, also have similar role descriptions. Under the job description, supervisors are to provide professional guidance and administrative leadership to other teachers, manage resources, control and facilitate training of staffs, complete financial reports to the Education Authority and manage use of ECE Centre facilities, and supervise the maintenance of facilities. The difference is that supervisors are responsible to the head teacher for attached schools and Board of Management for detached schools.

This is confirmed from an ECE supervisor who asserted:

> My responsibility is only to teach as any other ECE teacher in the ECE centre, although I have under my responsibility description to managed and lead the institution, my capacity to lead is limited. This is contradictory to the ECE establishment as a separate institution who also registered separately under the Education Act.

The issue of overlapping responsibility had affected the training of teachers. According to ECE data, only 17% of ECE teachers are trained, while the remaining are untrained teachers (Nanau 2018). This was justified by statements like this:

> Training is priority at the moment. I want to send the two teachers for training because they are untrained. However, currently I am looking for opportunity from the government but the government does not prioritise ECE teachers.

The challenge is who is responsible for taking charge of training untrained teachers in schools? Is it the head teacher or BOM who does not have any knowledge of ECE or the supervisor who does not have any power to make decision on such matters?

When asked about the current set up of ECE schools as provided for by the policy, supervisors, articulated these sentiments:

> Training must be given to all ECE teachers and proper building to accommodate children. Currently there is non and existing ones are in is their worst state. You know when head teachers are primary teachers their decision always favour primary development and not ECE. It should have its own board to decide on what is important for the centre. If we continue to have only one board for the whole school ECE will always left out. (ECE 3)

> The head teacher must also work along with a staff so that he see what is needed for the centre. If he expected us to do everything without support we might not achieve anything. (ECE 2)

> ECE does not have any set programme for teachers to follow. Teachers only do what is necessary for the day. It is very unorganised to the extent that it has no standard role to follow. If it have I did not glance it in my entire working life. (ECE3)

Empowerment of Supervisors and Teachers

Leadership is all about influence, and the capacity to do that is to have power. Power, according to Leithwood 1994 in Day et al. (2011) is attained through position held in organisations. In the Solomon Islands, ECE centre leadership is only given to head teachers and the Boards of Management. This has affected decision marking in

ECE centres as supervisors who lead the institutions have limited power to execute decisions. An ECE supervisor stated this:

> My role as supervisor is just to supervise ECE teachers and report to the head teacher. As a new supervisor I consult with the head teacher and ECE staff before making any decision. I did not have any power to decide on matters affecting ECE centre. I only go along with decision made by the head teacher. I did not have any power to make plans and develop new visions for the centre. It is the head teacher that has the power over all matters affecting the centre. (ECE Supervisor 3)

A head teacher confirmed that the power to make final decisions to ECE centres rests with him. However, he admitted that head teachers have limited knowledge about what is there that needs attention in ECE centres:

> Sometimes decisions I made only go along with reaction from ECE teachers and not of what I know and believe. As ECE is also under my administration, I share the responsibility to empower the supervisor to make decision on teaching and learning responsibility only and I make decision on administrative tasks.

The same head teacher stated that he has the power to make final decisions of ECE centre as stated in his job description in the Teaching Service Handbook:

> I am also responsible for early childhood teachers as they are part of the primary school system. The ECE supervisor who managed the daily operation of the ECE centre makes plans, but I made the last decision. I have the power to make decision on plans initiated by the supervisor and staff of ECE.
>
> In this school I give the supervisor and teachers freedom to plan for the ECE division. They are given the power to make decisions on children's learning in the classroom. This includes classroom management infrastructure, expend money given to ECE because it we only work from one budget.

The question that one can ask is whether the duty of head teachers to oversee the administration ECE is enough to influence change? According to literature, effectiveness in teaching can only transpire when leaders build relationships and motivate teachers to work (Kouali 2017). In the case of ECE centres in the Solomon Islands, motivation and inspiration are separated from teachers in the ECE centre. The leader who was empowered to provide motivation and inspiration is not part of the ECE teaching staff. The head teachers and BOM are not teachers and do not have the capacity to make decisions that are relevant and contextual. They also have limited knowledge of the work of ECE teachers and the importance of teacher training. A head teacher stated this:

> You know, all staff in my ECE division are untrained and because of that they are unregistered teachers. Therefore, my plan for them is to send them for training. However, the school may not afford that, so I am looking at applying for government sponsorship. (HM3)

The leadership responsibility to any organisation is mandatory. However, recognition of status to execute decisions is significant. Effective outcomes are more likely to occur when leaders know of their responsibility to solve teachers' needs and even have personal feelings (Kouali 2017). In other words, when there is authority wield on leaders, they then have the power and ability to drive the schools from where they are to where they want it to be (Graham 2007).

Setting Directions

Leadership is about setting vision and directions. It focuses on shared visions and shared commitments to improve organisations (Kouali 2017). This is referred to as transformational leadership where the focus is on development of the capacity to innovate and initiate new ideas (Leithwood 1994 in Kouali 2017). It is this "people effect model" that focuses on change of behaviours and adoption of new programmes and initiatives (Kouali 2017). From the interviews with supervisors and head teachers on setting visions and school directions, HT2 stated:

> I and my board of management committee create a vision for the whole school including ECE. I even help the ECE supervisor to plan for the ECE school. We collaborate in setting a vision for ECE because it is under my responsibility. The vision for ECE focuses mainly on the learning that can occupy children time.

However, on the contrary, the same head teacher highlighted two issues that he as the overall administrator has to deal with while administering ECE affairs:

> I allow ECE supervisors to set vision for the ECE school. However, the only limitation is that they have no resources to plan against or look forward to. They know that even if they set visions it will not work because they have no resources. They have no government support in terms of finance process for the school. Therefore, I am not directly deciding on ECE staffs. I only act on what ECE supervisor and staffs decided to do.

In another statement, a supervisor mentioned that she is part of the board who created a vision for the school:

> The board whom I am part of set the vision of the school. Although I am not part of those that set the broad vision as it was created before I took up leadership of the school. I focus on it to direct the school. However, short term goals that I want to achieve with students. First is for students to receive the best early education they can have. I ensure that my staff deliver the best for the students. In this way we provide a new approach for literacy and it works. Even when students were in early childhood they can read simple words.

This supports the argument that a leader's role to set vision is critical as it leads towards achieving a common goal of effective organisational outputs and outcomes (Ang 2011). When head teachers were asked about the role and responsibility head teacher 1 responded:

> My role is to lead the school in every way. I engage mostly in the general administration of the school. I manage the staff, resources, curriculum and students with the help of the staff. This include deciding on what is best for ECE.

When asked on what thing is best for ECE, he recommended further improvement in leadership at the ECE level:

> I wish the government recognised the importance of ECE and also provide funding for its operation. Therefore, ECE supervisor and staff does not have any power to act but to submit to the headmaster and his/her leadership. ECE staff are incapable of a lot of things. Currently the ECE set up is on holt as there are changes coming up.

The head teacher 3 responded to questions on vision as this:

> My school only operates one school vision for both ECE, primary and secondary. However, I allow ECE supervisors with the teachers to determine the progress of the ECE centre. This allows for collaboration on issues beyond their responsibilities.

However, when the head teacher was asked about the communication of goals and visions clearly to the ECE supervisor and staffs he made this statement:

> No, I did not bother to do that. The reason is I give full responsibility to ECE supervisor and staffs to decide on all affairs of ECE. However, I did not see any change from ECE. We still have the all thatch building with very little changes in ECE centres. Little progress is seen but not what people expected.

In terms of planning and setting direction for the ECE centres, head teachers claimed they are responsible for setting goals for the centre as provided for in the policy and Teaching Service Handbook. This was agreed and support by supervisors who mention this:

> I only make decision on what is happening in the classroom. The teaching and learning part of ECE I decide with the teachers on what's best for children learning. The HT have power over everything to do with ECE administration. (ECE 1)

When head teachers were asked about whether the decisions made on behalf of ECE are accepted by supervisors and teachers, they asserted that teachers' reactions to decisions made are both negative and positive. They claimed that teachers do not easily accept every decision made regarding ECE affairs because they only react to demands and do not set up visions that will drive improvement of weak areas in centres:

One head teacher stated this:

> I have incidences where teachers disagree with my decision. However, although it may not always be accepted by ECE teachers because it's my responsibility, I have to stand with the decision. ECE teachers may have their own views, but when it comes to decision making I always make the final decision. HM11

Accountable Officer for ECE

According to the ECE policy, the head teacher and BOM are accountable officers that are responsible to manage the funds. However, it is the responsibility of the both the government, parents and education authorities that should provide the funds. Unfortunately, the central government only provides assistance in terms of teacher salary and only teachers who have ECE qualifications from recognised teacher training institutions are eligible for salaries from the government (National ECE policy 2008). This means that much of the operational budget and the remaining teacher salaries have to be provided by the parents and Education Authorities. A head teacher said this:

> Parents provide money through school fees and fundraising. However, most ECE schools are located in very remote areas so far from the centre, so finding money is difficult for parents. Sometimes for months that teachers may not receive salary because there is no money coming in the school fund. Sometimes I step in and pay them with the primary school funds. The good thing is that they are part of the primary school. If they are detached school they may not survive. (HT 2)

The challenge with this system was highlighted by a supervisor who claimed that:

> The headmaster who is responsible for funds of the school have different priorities to deal with. His focus is to develop primary schools as that is where he get his credit. This has allowed parents to criticise my work as a supervisor and blame me for not doing enough for the centre. (ECE2)

In a privately owned ECE centre in an urban setting, the supervisor did mention information contrary to attached ECE schools. She claimed that she is the accountable officer of the centre who is responsible for school finance.

> I make decision and also implemented school projects. Therefore, I and my staff use the funds for the schools. I make decisions for how money is spent, especially purchasing materials for the school. In fact, the treasurer raise funds according to the request I made and I decide on the what to buy. The committee really supports my role as accountable officer for funds use for the school.

The statement clearly illustrates the difference between having a supervisor who is empowered with responsibilities of leading and managing with those are not. Research in school leadership found that positive effects on learning can occur only when leaders are empowered to build collaborative organisations, development of staff, having capacity to promote teaching and learning and create a positive school climate (Bosker and Krüger 2003; Hallinger 2010 cited in Day et al. 2016).

When headmasters and supervisors were asked about the support of the government for ECE, most claimed that the government does not provide any budget support for the schools:

> No, the government did not provide and special grant as primary and secondary schools. From what I see, ECE level is not recognised by the government. It sees it as worthless although everyone could agree with me that ECE is the foundation of children's education, therefore, it should be given the same recognitions and the other level.

The statement clearly indicates that ECE centres have very limited resources to operate with and only depend on the primary school budget. This confirmed the claimed by ECE 1 supervisor who asserted that they were only paid by the parents:

> Just imagine of the location that my school is in. It is a rural isolated community where money is hard. How can you expect parents to pay for the running of the school even to pay our salaries of all three ECE teachers?.

Supervisors claimed they are accountable for all programmes in the ECE centre including finance. However, the challenges are that they are responsible only to the head teacher who has the final say on all decisions made by the supervisor.

> I sometimes feel frustrated when some of my plans are not accepted by the school. I also feel down the early childhood centre is not develop as the primary and secondary division.

When asked about the extent to which accountable officers have provided support to the plans for ECE to improve children's learning this was what one had to say:

> Most of the effort is put on the development of secondary and primary. You can actually see from the development in the school. Both divisions have two to three story building while ECC still occupy a semi-permanent building.

Way Forward

Early Childhood Education in the Solomon Islands is recognised as a separate level of education that has its own policy guideline. Therefore, according to the study, it should operate separately as provided for by the National ECE policy guideline. However, as mentioned by participants of the study, none of what is stipulated in the policy is observed. The power to determine the leadership and management of ECE is the responsibility of the head teacher for attached schools and Board of Managers for detached schools. In this regard, any review of the policy has to consider and recognise supervisors as overall leaders of the ECE centres in the Solomon Islands. Unfortunately, supervisors of ECE schools in the Solomon Islands who are supposed to lead the school do not have any authority to do so, even though their job descriptions clearly show their role as managers and leaders of ECE centres. In this confusion, a clear demarcation of leadership roles has to be instituted. One way to do that is to have a separated BOM for ECE and also define clearly the leadership of primary or secondary from ECE. The implication is that leaders, whose role is to pursue a moral purpose, need to have the authority to do so (Graham 2007). According to the study participants, ECE supervisors do not have any authority to make change in their schools.

The supervisor's capacity to lead is only limited to managing pedagogies and the school curriculum. This is critical for improvement as leadership associated only with the classroom and supervision of what happens in the classroom appears to have less effect on students (Day et al. 2011). They have minimal power to make changes for improvement in other areas of ECE. This is contradictory to the functions of leadership, which involve setting direction, initiating new plans and influencing people and systems for change (Kouali 2017). Early Childhood Education Centres in the Solomon Island have numerous challenges, as found from the study, and to improve on that, the government should empower supervisors to lead the centres. The way forward is to regulate their responsibility to cover management of school funds. That would increase their confidence to set directions for the school. Further, they will take ownership of what they do and also work hard to achieve school goals and vision.

The core of schooling is to have effective and worthwhile learning, and in order to achieve that the leader should be proactive to tackle challenges that affect children's learning. That has not been the case of Solomon Islands, as found in the study. Supervisors who lead the ECE centres were demoralised from their moral purpose to lead. Early Childhood Education schools can only be effective when leaders are

empowered to make decisions that involve teaching and learning and provided with resources that cater for the smooth operation of the school (Mistry and Sood 2012). The policy only recognises the head teacher of the primary for attached ECE schools and the BOM for detached schools as responsible officers for ECE schools.

Conclusion

The Early Childhood Education of Pacific Island countries, over the years has had multiple constraints to solve. This has included outdated national policy guidelines, leadership and management, financing, qualified teachers and teacher training and curriculum. The effect of this has limited the people and government's initiative to provide ECE education service that is accessible to all children and also worthwhile. Leadership in ECE centres has been overlooked by national government policies for a long time. This study on leadership in ECE centres in the Solomon Islands is another step forward to rethink ECE schools. Research on leadership in Melanesian countries in the Pacific has found that recognition of the ECE teacher's role has been for teaching duties in the classroom only, and not for anything else. This had similarly been the case of Solomon Islands, as found from this study. The role of supervisors and teachers of ECE is restricted to teaching and managing the classroom only. This is unfortunate as leadership additionally concerns the matters of creating stability, strengthening infrastructure and providing timely feedback on teachers' work, which are furthermore significant to classroom learning. In order for the Solomon Islands to move forward in the early age of children's learning, the government must focus on strengthening the leadership in Early Childhood Education Centres.

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Chapter 13
School-Generated Innovative and Creative Ideas in Two Choiseul Schools, Solomon Islands

Jeremy Dorovolomo

Abstract This chapter reports on a study that aimed to gain consensus from participants on innovative and creative ideas they currently employed across two schools of Choiseul, Solomon Islands. Utilising the Nominal Group Technique (NGT), the study recruited six participants from two schools at the Choiseul Bay area of Choiseul Island, Solomon Islands. The study established consensus among participants that there is increasing opportunity for continuous staff development, an active subcommittee for dealing with student behaviour, and building new staff houses are positive projects. Eliciting positive activities from schools rather than leading with negativity has implications for the continuous development of schools at Choiseul and beyond. In developing countries, it is important to drive school improvement agendas is the living and working conditions of teachers. Having poor living and working conditions of teachers and the cumulative hardships they face, both professionally and personally, affect their capabilities and effectiveness in the classroom.

Keywords Solomon islands · Self-improving school · Strength-based theory · NGT · Student discipline

Introduction

Wolf (2016, p. 1) called the situation with teachers in low-income countries (LICs) as a "motivation crisis" in which teachers' work and living conditions often affect their motivation which in turn affects their effectiveness in teaching. Wolf further argued that there is overemphasis on student learning while teacher conditions, as critical agents of change and improved student learning, are too often neglected. Any school-based interventions in LICs should include improved teacher-related conditions and support (Wolf 2016). Postlethwaite (1998) surveyed 14 least-developed countries (LDCs) concerning the conditions of primary schools in: Bangladesh, Benin, Bhutan, Burkina Faso, Cape Verde, Equatorial Guinea, Ethiopia, Madagascar, the Maldives,

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Nepal, Tanzania, Togo, Uganda, and Zambia, on the condition of primary schools in these countries. While Solomon Islands is not included in Postlethwaite's survey, it is itself an LDC, which is a United Nations category that currently includes 47 countries in the world (UN DESA 2019). Postlethwaite (1998) found that in terms of staff housing for teachers, there is a variety of situations across the countries surveyed. In Bangladesh and Cape Verde, for example, teachers do not live in houses provided by schools. In Ethiopia, Madagascar, the Maldives, Nepal, Togo, and Uganda, most of the teachers are accommodated in private homes within the locality of the schools. In Zambia, however, 83 per cent of the teachers live in housing provided by the schools and these are almost always located at the school premises (Postlethwaite 1998). This is the situation at the island of study at Choiseul, where most the teacher housing is located at the school premises themselves.

Furthermore, teachers in developing countries may often have low qualifications and sparse opportunities for in-service training and professional development (Oplatka 2007). There could also be other challenging circumstances including overcrowding, a prevalence of multi-grade teaching, poor school facilities, lack of sufficient equipment and laboratories, poor working conditions, and low remuneration. These may cause unmotivated teachers and could lead to other issues of absenteeism. These circumstances have implications for the quality of student learning (Oplatka 2007). These and numerous other challenges are what teachers of developing countries are frequently faced with, and Lingam (2012) in the Fiji context argues that teacher education has a role in preparing teachers, particularly those teaching in rural schools, in the use of innovative ideas such as homestay and teaching placements. This can help prospective teachers to better deal with challenges they face in the teaching profession ibid. With ongoing reforms in Fiji, as is in other Pacific Island countries, Lingam, Lingam, and Sharma (2017) have stressed that teachers may be challenged by cumulative ongoing changes and the ensuing implications on teacher workloads. Thus, ongoing professional development is integral so that teachers are able to cope with the new changes and demand (Lingam 2012).

Consequently, school leaders, teachers, and the wider school community can make a difference in their various school settings. Hargreaves (2014), therefore, stressed that a mature self-improving school system has three important dimensions: professional development; partnership competence, or being able to work with partners successfully, and collaborative capital, which entails being creative, analytical, and building alliances. Creating deep partnerships for the improvement of the school is vital, and where there is high social capital, trust and reciprocity can thrive (Hargreaves 2014). Schools are living systems (Elgart 2018) that require continuous improvement within all its constituent parts: classrooms, buildings, teachers, students, leaders, parents, and stakeholders. The underpinning aim in a school's improvement plan and strategy is frequently the improved student learning and experience. Each school is different, and the onus is on schools to identify the most salient issues in order to allow leaders to engage all stakeholders within and outside

of the school in its improvement (Elgart 2018). This chapter describes a research project which aimed to gauge participants' opinions concerning innovative ideas their schools have had about creating improvements within two schools of schools of Choiseul, Solomon Islands.

Theoretical Framework

This study is framed within a strength-based theory (Rawana et al. 2011), which encourages a focus on positive attributes rather than on the things that have gone wrong. A strength-based approach is interested in uncovering the individual or organisation's strengths and amplifies them while also aiming to find ways to develop new strengths (ibid). It is optimistic of the potential of children and the school, rather than being deficit-based. Within this theory, it is vital to embrace the strengths of the child or the school in order to chart expectations of improvement and effectiveness either in the management of the curriculum or the school itself (ibid). A strength-based theory furthermore expects leaders to identify the strengths of subordinates and marshal them towards creating the conditions that would enable the success of the individual and the organisation (Key-Roberts 2014). Instead of focusing on diagnosing and correcting weaknesses, it is concerned with getting people who work for the organisation to recognise and realise their strengths. It is the duty of the leader to manage the existing strengths and potentials for the betterment of the organisation. It is important to identify those strengths, provide feedback, positively garner subordinate strengths, build and maintain a positive climate, care and empower subordinates (ibid).

The strength-based theory is not preoccupied with the IQ and cultural-deficits of pupils, but rather develops and builds on their strengths to attempt gaining optimal student performance (He 2009). He (2009) added that it involves articulating positive assets of the students and the school with optimism for the future. Bouskila-Yam and Kluger (2011) stressed the underlying importance of gauging the success stories of individuals and the organisation, while utilising those existing strengths in different and new ways. Rhee et al. (2001) emphasise that a strength-based approach to many aspects of a school is an imperative paradigm shift, as too often areas from policy, curriculum delivery, school counselling, staff appraisal, school planning, to curriculum assessments, can be overly deficit-based. Instead, the richness of the collective accomplishments of children, teachers, and the school can be harnessed in a manner that ensures positive development (ibid). It is vital to begin from the point of view that children, parents, and the school have strengths, resources, and capabilities to face challenges or utilise opportunities for the advancement of pupils, and the school (Laursen 2000). Laursen (2000) further stresses that instead of being preoccupied with what is wrong with society, an organisation and its members ought to focus on its adequacies and successes. Following this approach, the present study has been framed to gather consensus from participants as to what positive happenings have occurred at their schools with respect to school conditions and planning.

Methodology

This study utilised the Nominal Group Technique (NGT) as espoused by Bailey (2013). The technique follows four stages: (a) the individual generation of ideas through participant answers or suggestions to a question being posed on a piece of paper, (b) once participants have had a chance to write down their own ideas, each individual reports in a round robin format with these being recorded on a paper and numbered sequentially, (c) opening up of discussions or seeking clarification concerning the listed items, (d) voting to gain consensus. For the stage of voting, this study used Hall's (2014) 3-2-1 method of assigning points on generated ideas, where 3 points are allocated to a participant's top-ranked item, 2 points for the second choice, and 1 point is given to the third priority. The collective ranks of each generated idea are tallied, and the items that received the least or no votes become eliminated from the list. A second round of voting is conducted on the reduced list, which is important to gaining consensus on the most important ideas. Ideas that received the least rankings were eliminated, and the final consensus was reached. Kelly and Wright (2010) argue that the advantage of the NGT is that it ensures each individual participates more equally rather than dominant personalities dictating the outcome of the group processes. In addition, it is a democratic, efficient, and effective decision-making process aggregated into collective decisions (Bailey 2013; Kelly and Wright 2010). The number of participants in a Nominal Group Technique (NGT) has ranged from 2 to 14 but a maximum of 7 in an NGT is recommended (McMillan et al. 2016). This study has a sample of six schoolteachers as participants, which was within the recommended number of participants in a group. McMillan et al. (2016) pointed that there can be multiple groups of similar sizes, depending on the purposes of the research. This study employed a single NGT group to discuss a consensus on what they feel are positive innovations happening at their school.

In this study, the question was posed, "what positive things have happened at your school recently?" In response to this, eight ideas were generated in the initial round robin call for points in the NGT process among the six teachers from two schools:

- Flower beautification which changed the physical outlook of the school
- An active subcommittee for student discipline triggered improved student behaviour
- Allocated particular colours for the school such as yellow and green, making it a "ready-go" school
- The building of new classrooms to cater for subjects that would previously have used the dining hall
- Building of staff houses being underway is positive
- The change in the order of school assemblies which now include national, provincial, and school anthems is uplifting
- There is some level of commitment to continuous staff development
- God-fearing and spirituality elements among teachers helped the school climate.

Table 13.1 Second round of voting results

Rank	Innovations and creative activities	Ranking points
1	There is some level of commitment to continuous staff development	11
2	An active subcommittee for student discipline triggered improved student behaviour	6
3	Building of staff houses being underway is positive	3
4	God-fearing and spirituality elements among teachers helped the school climate	2
4	The building of new classrooms to cater for subjects that would previously have used the dining hall	2

Participants were given chance to offer comments. There was comment that while new buildings have been built, there are also premises such as computer laboratories are not working. It would also require computer training for staff as well. Libraries are also a neglected area related to helping with literacy issues in the province.

This initial voting eliminated three items. The second round of voting results is displayed in Table 13.1. The top three ranked current innovations and developments across the two schools concerned in this study are discussed below.

Discussion

Professional Development

Participants agreed that increased recognition for the need for continuous professional development of teachers is positive. Two of the participants had just come back from further studies overseas. There was a general feeling that the Choiseul Province has improved on the support for the development of teachers. This was a more positive image from an earlier study conducted by Dorovolomo (2008) in Choiseul, which showed that teachers felt that staff development was a neglected area. Despite the improvement in support for teacher professional development in the province, there is also room for further improvement. Teachers teaching in remote schools need systematic support and Dorovolomo (2010) suggested in the Choiseul situation that collaborative efforts need to be established to get principals and head teachers together on a regular basis to allow learning to take place among school leaders. Moreover, principal and head teachers' associations could be formed to enable continued support among school leaders and instil each other's enthusiasm. By getting together rather than remain in isolation from each other, school principals and head teachers can achieve more than they would individually. This can eventually have significant transformations in student learning.

This study recommends that nationally, strong principal and head teachers' associations need to be formed and networked with provincial associations. Provincial associations should meet at least twice, while nationally, it could happen once a year. In Fiji, for example, there are active principal and head teachers' associations. The Fiji Principals Association aims to provide "a forum for support, encouragement and professional development of secondary school principals; and leadership in all aspects of secondary education in consultation with the Ministry of Education and relevant stakeholders" (Fiji Teachers Association 2015). Moreover, the Fiji Principals Association provides a venue for networking, professional development, and encouragement for its members. By having platforms through which principals can voice concerns and ideas, isolation is avoided, and the future and quality of education in Fiji is being continually redefined. The association, besides other activities, organises regular national conferences for principals (ibid). Similarly, the Fiji Head Teachers Association is also active, and in 2017, at its annual conference, this time held in Lautoka, many pertinent matters including pass rates, monitoring procedures, literacy and numeracy skills, and external examinations were discussed (Mala 2017). These are potentially what Solomon Islands principals and head teachers could organise themselves into, and thereby be given maximal support by the Ministry of Education. Broad (2015, p. 16) found that the "most significant barrier to engagement with beneficial and meaningful professional development is the result of teachers operating in impoverished and limited teacher networks". Having a venue for purposeful dialogue and sharing among Solomon Islands, school leaders are integral to initiating creative responses to student needs and for driving continual improvements in school performance. Sufficient funding could be allocated by the Solomon Islands Ministry of Education in collaboration with education authorities to implement this. It is important that school leaders do not have impoverished networks and work in isolation from each other. The stronger the network, connections and the wider their web of networks, the more school leaders are likely to access meaningful professional development.

Student Discipline

Participants of this study agreed that an active subcommittee for student discipline triggered improved student behaviour in their schools. The Solomon Islands Broadcasting Corporation (SIBC) (2014) reported that a Choiseul school principal is concerned that the Community High Schools (CHS) do not provide a disciplined environment for students as opposed to boarding schools. It was claimed that there is worsening discipline issues at CHSs whereas in boarding schools, students are often more controlled within restricted boundaries. Aside from this, it has not been possible to identify other literature on student ill-discipline at schools in Choiseul, Solomon Islands. This study, therefore, helps to fill a gap in the literature about Choiseul and Solomon Islands at large. Student indiscipline refers to "student behaviour that deviates from school expectations" (Ametepee et al. 2009, p. 155). In the Fiji context,

Nasiko (2016) stressed that it is the responsibility of school heads to find out what causes children to be absent or ill-disciplined as schools are mandated to provide the best education for school children, which begins with attending classes diligently unless it is necessary to be away from school reasons such as illness. Parents also have a major role to play in curbing truancy, and schools can collaborate with them to address causes urgently before they become chronic (ibid).

Furthermore, Lasaqa (2008) pointed that it is more than just the responsibility of the school and parents, but it should also involve the public and community to report students who loiter around town during school hours, many of whom wear uniforms. Lasaqa emphasised this after seeing students playing billiards at a Nabua entertainment centre during school time (Lasaqa 2008) in Fiji. Also, in the Fiji context, Mele (2016) discussed that truancy contributes to these students' poor performance. These students often have some form of struggle, difficulty, and negative influence to be absent from school. However, truancy is not only a Fiji concern but a global issue and in other Pacific Island countries such as American Samoa, a penalty for parents of truants is enforced, particularly from families who are not living under the traditional village council who are often absent from school. There, the police also have authority to cart students who loiter back to school and to inform parents (Aleki 2000). At Ebeye Island, the second-biggest urban centre at the Marshall Islands, one in every four children is absent from the local primary school (Rowa 2007). Rowa (2007) commented that many children may need to be supported with breakfast and being helped with school material. Truancy has implications for performance levels in the country, and neglect of such negative elements will over years have detrimental consequences (ibid). At Rarotonga in the Cook Islands, the Ministry of Education, the police, and school principals and heads are working together to crack down on truancy on the island (Parnis 2011). Parnis (2011) remarked that it is important to identify students who are at risk very early and find solutions with parents and the community to tackle non-attendance at school.

With instances from other parts of the world, Ametee et al. (2009), in the Zimbabwe context, compared all boys' and girls' schools and found that there are more discipline issues in boy-only schools. Areas of indiscipline in the all-boys school were truancy, insubordination, leaving the campus without permission, improper dress, spoiling school property, and possessing dangerous implements. These are common indiscipline issues at the all-boys school, but there are different patterns of indiscipline in different schools possibly due to varying policies and demographics of the schools. They also argued that indiscipline issues such as truancy are affected by children's socio-economic situations, and often they had to help sell fruits and vegetables at the market to supplement the family income (Ametee et al. 2009).

Indiscipline, both in and outside of the classroom, is a concern for any Ministry of Education, parents, and the school as it impedes perpetrators and other students from reaching their potential. As Peacock (2004) stated, "pupils have the right to learn undisturbed and teachers have the right to teach undisturbed" (p. 6). The rights of students to learn and the rights of teachers to work in a conducive environment should be defended, and Peacock (2004) recommended that Ministries of Education should provide funding to curb indiscipline at schools including workshops to share good

practice. Peacock also added that it is important that schools track student behaviour, get parents to be involved in the solution, use exclusion as a final resort, support staff who have difficulty in dealing with student indiscipline and to establish a working group to address such issues. Participants in this study at Choiseul recognised the improvements in student behaviour when a working group, or a committee, was formed to help coordinate the initiative to reduce student ill-discipline in their schools. In Solomon Islands schools, school exclusion is administered too readily, but should be decided as the last resort. It is furthermore recommended to review policies around student discipline that is positive and nurturing.

Mitchell (2017) reinforced that school disciplinary policies and implementation need to be respectful of students so that referrals, suspensions, and expulsions do not harm young people. Mitchell stressed that schools need to have a counsellor and a support system that aims to prevent serious indiscipline occurring in the first place, with an emphasis on knowing the pupils' circumstances. Students who have infringed school rules need to be given the tools to assess and change their own behaviour (ibid). In England and Wales, the legislative environment of the discipline in schools has evolved, as it is in the interest of society that schools are: not overwhelmed with ill-discipline that it affects learning; that the rights of both students and staff are taken on board in the disciplinary processes, and if students face exclusion, they need to eventually be provided sufficient education, which might be at a different setting (Harris 2002). Popularly, the education system had been based on the *in loco parentis,* where teachers are parents' replacements when they are at school. It was assumed that when parents send their children to school, teachers are given the autonomy to implement punishment within the law (Harris 2002). Arum and Ford (2012) asserted that there is relationship between discipline problems and lower academic achievement. They note that in the USA, for example, African American students are disproportionately represented in disciplinary actions, which have an effect on their test scores. Arum and Ford also noted that countries that have far lower school disciplinary issues such as Japan and South Korea consistently outperform other countries in the world in standardised math and science tests. On the other hand, countries that are also economically strong such as the USA, Israel, and Chile, but have higher student disciplinary problems, show lower performances in tests (Arum and Ford 2012). Therefore, positive student behaviour management is important as it has implications for student learning and achievement.

Staff Housing and School Facilities

Participants in the study prioritised the building of staff housing as one of the innovative projects taken by their schools. In one of the schools, there were comments also that the dining hall was being used as a classroom before new classrooms were built. These innovations were seen as constructive in student learning. However, there was comment by participants that the computer laboratories are not working and staff would need computer training to deliver courses in computing rather than

simply building computer laboratories. It was felt that computer literacy should come with acquiring computers at schools, rather than acquiring hardware without the training of staff members. Furthermore, participants felt that the building of new staff houses is important to the morale of staff, and this has implications for improved student learning. However, there needs to be caution in other areas such as building a computer laboratory that no one can sufficiently operate and instruct.

Lane et al. (2006) encouraged administrators to possess the competency and aptitude to manage facilities that are put at their guardianship to enable a conducive environment for learners. In the USA, Lane and colleagues (2006) reported that many facilities and classrooms at schools and universities are inadequate, while others are endowed sufficiently. They suggest that it is important to include in school leader job descriptions the role to improve and maintain school facilities in collaboration with partners. School leaders should be empowered to drive the school improvement plan. The state of the school reflects the community it serves, as quality facilities will have a positive impression on parents and the public (ibid).

In the Solomon Islands context, Lingam and Lingam (2013) found that often, school leaders perceive their roles in school development planning as being unprepared for the role, unaware or viewed as adding to their current workloads. The author of this chapter is a past School Principal at a boarding rural high school in Solomon Islands in the late 1990s, and while one goes up the hierarchy through experience, professional development activities pertaining to the job of the school leader were not available. Nevertheless, one of the author's major undertakings was the acquisition of a new, bigger, and modern school generator, acquired through school organised fundraisers and in collaboration with the British High Commission. However, as Lingam and Lingam (2013) emphasise, a far more intricate school improvement plan in collaboration with partners is vital.

Smith and Haslett (2017) studied schools from Kiribati, Vanuatu, and Solomon Islands and noted that there "was the wide variation in quality of classrooms within schools. Some were leaky, dirty and empty, with broken louvres or shutters, whereas others were clean and well decorated, either with wooden desks and commercially produced posters, or with locally woven mats, teacher-made decorations, and student drawings" (p. 419). This is a typical description of schools in Solomon Islands and Smith and Haslett, who argued from a children's rights perspective, stressed that school children have the right to a good standard of classroom environment and conditions, as many often leave home to be in boarding schools or live with relatives near a school (Smith and Haslett 2017).

In addition, it can be said that teachers also have a right to good living conditions. In Solomon Islands boarding and rural schools, staff accommodation is also built on the campus, and in this study, the fact the new staff houses are being built is commendable. As Huitarau (2015), in the Solomon Islands context, has emphasised the areas of school children's academic performance, staff development and infrastructure—including staff housing—are critical to the school's success. Huitarau stressed that the school may have a well-equipped laboratory, the best curriculum, and resources, but if the teacher's living conditions and salary are not sufficient, it will affect teacher performance and consequently student learning (Huitarau 2015). Thus, the building

of staff housing, as indicated by participants in this study, is a positive occurrence, and schools in Solomon Islands generally have a way to go to ensure teachers' houses are available and in good condition.

Conclusion

It is important to note that the findings of this study show that school improvement is not just about student-related inputs and outputs, but also about teacher conditions and professional development as well. When teachers' professional development and living conditions are taken care of, they are bound to have positive implications for teaching and learning. It is recommended that schools implement an intricate school improvement plan as quality improvement plans have an association with improved student learning outcomes (Fernandez 2011). The two sampled schools in this study are remote and rural schools at Choiseul, Solomon Islands. Making positive changes in the manner in which student behaviour is managed in providing staff professional development and in improving teacher living conditions is commendable. Improvement projects should have a positive effect on all students and staff. Despite weaknesses that the schools may have, it is imperative to also focus on its strengths and set high expectations for students and staff. Being located in rural locations does not mean these Choiseul schools cannot perform well. They can still continually improve through professional development of teachers to meet the needs of students in those contexts, consistently implementing positive behaviour management strategies, and placing importance to staff living and working conditions.

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Chapter 14
Strengthening Collaboration with the Community for Sustainable Development: Implications for School Leadership

Narsamma Lingam and Govinda Ishwar Lingam

Abstract The study reported here focused on school-community partnership that is directly related to school-wide improvements. Specifically, it explored school leaders' perceptions of challenges faced in establishing a strong relationship with the school-community for sustainable development. The participants for the study were rural high school principals from different geographical settings located in the rugged terrain of Fiji. Data for the study were gathered from interviews with these participants who attended a school leadership training programme. The data showed that the school leaders faced difficulties in working collaboratively with the school-community to expand and enhance students learning opportunities. The challenges of establishing networks and creating meaningful partnerships can be partially explained by their lack of adequate professional preparation in specific-leadership skills. The existence of such inadequacies resulting from the lack of systematic training of the school leaders hampers the quality of education their schools can provide. This has implications for the children's learning outcomes, the school community's expectations for education and government's investment in education.

Keywords Fiji · School-community collaboration · Sustainable development · School leadership · Parental involvement

Introduction

Quality learning and teaching is enhanced when there is a strong school-community partnership focused on student learning outcomes. Research has shown that collaboration between school and community can influence students' learning outcomes, social development and a sense of well-being (Epstein 2011). To this effect, in recent years, there has been a growing interest in creating and sustaining a strong

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school-community partnership as a means to provide more support to students and staff. This growing interest and concern has produced numerous forms of school-community collaborations by providing social support networks for students and families, teaching each other coping skills, participating in school governance and school activities (Robinson et al. 2009). The provision of education is regarded by educational professionals and community members as an avenue that links schools to the wider community. Therefore, school leaders need to develop partnerships and engage a range of stakeholders actively and consistently through communicating, knowing and understanding its needs and expectations.

According to Hallinger and Heck (2010), learning-centred school leaders play a key role in both establishing and supporting community engagement and partnerships. Facilitating such learning requires cooperation and collaboration among schools, students, teachers, families and with other stakeholders, and engaging them effectively as partners in learning and teaching is arguably one of the most important issues facing school leaders in the twenty-first century (Epstein 2011). The current study adds to this emergent theme in the literature by identifying the challenges faced by school principals in building and sustaining collaborative relationships with the school-community for supporting student achievement and other positive outcomes.

School-Community Collaborations

School-community partnership is defined as parents, families and other stakeholders, who take an active role in creating a caring and supportive educational environment (Epstein 2001). Parents and schools, separately and in combination, offer potential sources of support for pupils' learning and development. A relatively extensive body of literature documents the importance of family and community involvement for rural school improvement efforts, particularly in support of student achievement (Epstein 2001; Robinson et al. 2009; Semke and Sheridan 2011). Ideally, the development of a powerful relationship between schools and community is based on the premise 'that these stakeholders should have some input in the educational programmes and process that are initiated and implemented in their schools, especially those that are related to enriching learning and student behaviour' (Clarke and Wildy 2011, p. 30). Effective programmes that engage families and community embrace a philosophy of partnership. The responsibility for children's educational development is a collaborative enterprise among parents, school staff, and community members. Given the limited resources available in many rural schools, powerful school-community relationship can be especially beneficial to the success of rural students. For instance, in a study of rural schools in California, USA, Masumoto and Brown-Welty (2009, p. 15) argue that the ability of the school leader to establish 'linkages with multiple community sources' proved to be crucial in helping the school accomplish its mission.

Additionally, family and community involvement play important roles in rural schools' educational planning. It is now well established that if parents are positively involved in their children's education, then the children's learning outcomes are enhanced. Parents who are actively involved in their child's education are those who frequently communicate with school staff, volunteer their assistance to school, monitor and help their children learn at home, actively participate in schools' decision making and collaborate with the school community (Robinson et al. 2009). It is evident that children benefit when meaningful connections are made between parents and the school in their environment (Semke and Sheridan 2011). In the New Zealand context, according to a review of literature commissioned by the New Zealand Ministry of Education (2006), approximately 40–65% of variance in outcomes is attributable to the influences of family and communities depending on the focus of outcomes. The research indicates that community and family involvement have a significant impact on the level of development and upon children's learning. In a similar study in New Zealand, Hattie's (2003, p. 3) extensive data analysis and research synthesis over a culmination of many years demonstrates:

> [The] levels of parent and community engagement and the contribution of the home environment in forming the attitudes, values and positive behaviours contribute 60% of the factors that conduce to effective learning and personal development. The real synergy is of course linking that positive effect to the 30% of positive factors which school provides through quality teaching. (Hattie 2003, p. 3)

A clear message from Hattie's research is that school performance also depends on the level of parental involvement. It is widely acknowledged that support from parents, families and the community at large has a positive impact on the quality of education, especially in remote rural environments. Numerous researchers have reported on the importance of local community involvement in rural school improvement efforts (Barley and Beesley 2007; Batt 2008; Bauch 2001; Harmon and Schafft 2009).

However, desirable such effective and sustainable partnerships do not spontaneously happen. Research illustrates that there are issues that limit the willing engagement of school principals with parents, families and communities. Some researchers report that rural school principals may view parents and local community interests as hurdles to school improvement (Clarke and Wildy 2011; Corbett 2007; Larson and Howley 2006). For example, Budge (2006) reports that, despite having benefits, rural principals viewed rurality as having more obstacles than possibilities in rural education. On the other hand, parents' decisions to become involved in their children's learning varies according to: (1) their construction of the parental role; (2) their sense of self-efficacy in helping their child succeed and (3) the invitations, demands and opportunities for involvement presented by the child and the school (Macgregor 2006).

Conceptualisation of School Leadership

Although the significance of effective leadership and management is widely acknowledged for the successful operation of schools, conceptualising leadership and understanding the role of school leaders in today's changing world are becoming increasingly important. Empirical research demonstrates that effective school leadership creates a conducive learning environment that supports and enhances effective learning and teaching (Fullan 2006). Over the past decades, international literature on school leadership provides a range of conceptualisations. The present study employed the conceptualisation of school leadership known as collaborative leadership which views leadership more broadly than just the principal. It entails school structures and organisation processes that empower and encourage staff, students and the community in broad participation in decision making and accountability for student learning outcomes.

According to Hallinger and Heck (2010), 'collaborative leadership focuses on strategic school-wide actions that are directed towards school improvement and shared among the principal, teachers, administrators and others' (p. 97). From this perspective, leadership is increasingly viewed as an organisation-wide phenomenon where leadership is distributed to a variety of people and roles that include heads of departments, syndicate heads, teachers, and the wider community. Literature reviewed indicates that the role of the school leader is multifaceted and complex. As a result, the focus on principals as leaders for learning and teaching within their schools and the amount of attention paid to increasing student achievement have risen due to recent globalised reform efforts (Day et al. 2011). From the Pacific Islands context, Puamau (2005) reports that to compete with the rest of the world, Fiji is implementing many reforms in an ambitious attempt to improve the quality of education and education systems. This has strong implications for school leadership and educational systems for the provision of quality education, particularly in rural settings. However, the circumstances prevalent in rural schools have become extremely challenging for principals to effectively engage with the school-community for sustainable development.

Some of the complex challenges related to school leadership responsibilities include staffing issues, demands from parents and community, learning and teaching, budget and resource allocation, school policies and the legal and regulatory frameworks (Woods et al. 2009). These factors, together with the contextual challenges of rural schools, can create a work environment that may make it difficult to advance to higher academic standards. Leadership in rural schools, therefore, appears to be difficult for some as the complexity of issues and the daily demands on school principals seem to be increasing. On the other hand, Fullan (2002, p. 16) observes 'Only principals who are equipped to handle a complex, rapidly changing environment can implement the reforms that lead to sustained improvement in student achievement.' Such findings emphasise that principals need to have a range of leadership skills to deal with the school-based and community-based challenges confronting rural schools.

Purpose and Significance of the Study

Global education reform initiatives are making rapid transformations in the education systems and school restructuring movements, not only in developed countries but also in the Small Island Developing States (SIDS) of the Pacific including Fiji (Bacchus 2008). These reform initiatives in education are geared towards attainment of better quality education through partnership with school stakeholders (Lingam 2017). The prevailing reform agenda is having significant impacts on leadership practices of principals not only in urban schools but also in rural schools. The purpose of this research, therefore, was to explore rural high schools principals' perceptions of the challenges they faced in engaging the school community to support student success and well-being. The following research question guided this study: *What challenges do principals perceive in collaborating with the school-community?*

The emerging literature on school leadership, identifying a spectrum of challenges faced by principals of rural schools, has covered contexts beyond the Pacific region, particularly rural areas of developed and Western countries, with some snapshots of the situation in Fiji and Solomon Islands (Lingam and Lingam 2014; Lingam et al. 2014; Sanga 2012). However, there is limited literature about support for school leaders towards engaging school community for supporting student learning within developing countries. This situation can be problematic in informing policy and practice on all aspects of sustainable education, including school-community partnership.

The current study attempts to address these gaps by contributing a report on an empirical study about the perceptions that school leaders had formed of a leadership and management training programme they had just completed. Since this is carried out in a small developing state in the Pacific, Fiji, it provides an authentic Fijian perspective on the difficulties principals face in building and sustaining school-community partnership. Although it is a small-scale study, nonetheless it can provide valuable information and insights about school-community partnership for sustainability in Fiji. In addition, the findings could be useful to leadership training institutions and the Fiji Ministry of Education for future school leadership training to ensure that it is constructively aligned to the professional needs of school leaders and teachers. It is hoped that the findings of this study will potentially assist policy makers, practitioners and school communities to address issues pertaining to student learning and success.

Research Methodology

Given the exploratory nature of this study, the research design of the present study was informed by the interpretive inquiry approach using a qualitative multiple case study methodology. This study employed a qualitative method design whereby the researcher drew the data collection tools from four rural secondary schools to gather

information. In attempting to understand participants' real-world situations, the focus of inquiry on the principals' professional practices was through survey research with a purposefully selected sample of participants from rural schools to gain insights and in-depth understanding of leadership challenges of rural principals. Qualitative case study design involves a naturalistic approach and since the purpose of this study was to gain understanding and meaning (Lincoln and Guba 1985), qualitative data collection was from the natural setting of each participant's workplace.

In this study, qualitative data was collected through in-depth interviews with four purposefully chosen principals from five rural schools. The goal of this study was to select participants that could provide a wealth of information relating to the contextual challenges that influence the work of rural school principals. In order to increase theoretical density and ensure maximum variation (Patton 2002), the participants in this study were selected in such a way to ensure that all of them were from diverse backgrounds in terms of leadership experience in rural schools, gender, age, leadership training experience, school performance and accessibility. The aim of using this small purposefully selected sample was to explore the quality of the data and not the quantity. For the purpose of this qualitative study, only four principals were targeted because of their training experience provided by the ministry on building collaborative connections between schools and their community. In addition, this purposeful sample was selected to gain principal's perspectives on the link between their daily leadership practices and school community that enhance academic performance within the realm of rural schools.

In order to obtain answers to the research questions posed, the present study employed an inductive data analysis strategy to identify emerging themes (Creswell 2012). This approach allows searching out, exploring the general sense of the data and interpreting meaning behind the rich data that most qualitative research generates. Responses from interviews and questionnaire data were inductively analysed (Miles and Huberman 1994) allowing the researcher to maintain a complexity and richness of data collected. The inductive analysis of data derived from each interview allowed for the identification of categories of meaning that were then used in a process of cross-case analysis (Miles and Huberman 1994).

Findings

Support from Home

Parental involvement was considered important in supporting their children's learning. However, it is engaging parents in their children's learning that seemed problematic for the principal of School A. It seems apparent from the interview data that School A parents have been least involved in school-related matters. The principal of School A reported that 'lack of awareness' is the biggest challenge in the involvement of parents in their children's education. Additionally, the education background of low-income parents can be considered to be a barrier to parental engagement in rural schools as exemplified in the following extracts about parents:

> Yes, very much. I think they have a lot of distractions in the village especially when they don't finish their homework and they hardly do what has been told like assessment … internal assessment tasks (IA). Teachers are finding it very difficult. They can't complete their tasks like their English project. For assessments … IA Tasks, has a lot of activities. The work is done again by the teachers. There is lack of support from their home.
>
> The community is not really like educated with the value of education. They are not really supportive. And behaviour... they lack of discipline, they don't have manners. They don't know how to behave, like before we use to be afraid of the teachers, now they don't I don't know what's wrong with them.
>
> They have no respect and no moral values. Their moral values are integrating. I don't know why. They don't know how to speak to the teachers. Like before, we know how to respect the teachers.

Although, parental involvement was considered important for supporting their children's learning outside of school, their cooperation on discipline-related matters was an issue for Principal A.

Parents were seen as willing to condone absence from school, keeping children away from school to do household chores during school time and unwilling to participate actively in their children's education. The principal from School A echoes her concerns about student absenteeism from school:

> Yes, we have some cases like regular absentees' like, it's from home, like some students they are 'brought up' by their parents, I don't know the specific number, but there are some cases that they are 'brought up' by their grandmothers. They are broken families and single mothers even though, they sometimes doesn't complete the full week. Absenteeism is a real problem.

The above statements provide evidence that the principal faces special challenges in getting parents involved, citing that there is a general lack of concern in supporting their children's education. The principal emphasised parent's support of their children in school activities, supervising homework and instilling moral values. However, these aspects seem to be lacking in the parents according to the principal. Surprisingly, the principal did not have any plans for engaging parents in the education of learners in School A.

Opportunity for Collaboration

Having people-centred qualities and skills can help in encouraging parents and community involvement in school activities. Parental support of school activities focused on children's education can be instrumental in bringing about improvements in the school. The principal of this school perceived that parent involvement was low and increasing parent involvement was a major challenge due to the distance and transportation difficulties. Although the focus of his school was to increase parent engagement, the school did not provide much opportunity for collaboration and parental engagement with the school. The following responses illustrate this:

> Yes, we have. Actually, we got it in our annual plan. We are going to have a community programme. We will be having the village visit to tell the community what are the problems we actually encounter in handling the children, especially when things are not done or homework is not done. Things like those that they can be aware of like to be promoted to the next form and missing a lot [of] classes and things like... We need to highlight at the early stages what we will be doing in those community awareness [programmes] which was actually planned in our [schools] annual plan.

Lack of Time

Principals of rural schools wear many hats, having to grapple with the demands of teaching, leadership and administration. The escalating role demands of full-time teaching and leadership responsibilities can create tensions, and principals feel burnout by role multiplicity that cannot be executed thoroughly due to a lack of time for any particular task. Role complexity and multifocused demands, together with the tensions they create, are difficult challenges for rural principals. However, when one principal was asked if he was able to engage parents and the community in the education process, he made the following comments:

> Yes we did manage to move out. We were able to get those who were living nearby we couldn't reach the parents who live in remote areas. But in parents day we managed to get in touch with those parents.

One of the tensions facing the principal of School C was that of balancing the need to get involved in community affairs while simultaneously managing the day-to-day running of the school. When the principal was asked about his plans to involve community in education of the children, he described it in the following way:

> We have to take out our time, may not be during working days but during weekends we have to make out a time so we can visit the communities during weekends.

The above statements imply that that this principal has a substantial teaching and administrative responsibility within the school that prevents him from reaching out to the parents during official school hours.

Participation in School Meetings

Living close to the community is a reality given the small population density in rural areas. However, this can be problematic for principals of rural schools when it comes to community support and collaboration. The principal of School C believed that the 'biggest challenge' was the community not taking ownership of the school. The challenges of garnering community support by the principal of School C are reflected in this lengthy description:

> One major challenge is the support in the community, like they do not realise that actually the schools, belongs to all of us and not entirely the teacher's school where we will be doing entirely the work. This is their school, but most of the time it is like they... just leave it aside [on the school]. They send their children and that's their job, but not realising that they have more than that. They actually have to see that their children get the best from the school. How they can do that is just by coming over and by finding out what they can do for the school, rather than waiting for what the school can do for them.

It is apparent from the above response that there is lack participation by parents in their children's education. The principal perceived that parents' lack of interest in their children's education deterred them from their support towards school activities such as supervising and guiding in homework activities. For example:

> Normally when parents turn up for the meeting or the AGM there is change in the members every 3 years. Within these three years there was hardly any parent turning up to school. When there is election that is the time parents turn up.

It is evident from the above statements that parents only turn up to the school for the purpose of voting for their candidate in the election for the school management board so that their voice can go through the candidate being elected.

Socioeconomic Status

Low socioeconomic status of rural community and parents can have a negative impact on student learning in the sense that poor parents fail to provide educational and financial resources which are pre-requisites for student achievement. In Fiji's education system, socioeconomic status of parents is measured by the rate of bus fare vouchers given to the students. In terms of parent's income and poverty level, one principal highlighted that 'most of the parents are farmers; some of them are casual worker.' According to Principal B, 70% of the students receive bus fare vouchers, which relive the burden of parents to provide bus fare every day for their children to attend schools. While this gives some relief to the parents, they are still to provide the basic necessaries for education such as uniforms and writing material as well as provide healthy meals for their children. The impact of poverty also hampers student's daily attendance to school in the sense that 'some parents were not able to provide lunch for their children while others have to 'baby-sit' their younger siblings when their mother gets sick.' This statistical information indicates that the school is served by a low-income community. The principal also highlighted that due to low socioeconomic status of parents, garnering community resources is problematic for School B although he managed to get some resources from 'some generous donors who had donated some computers for the school.' However, it was observed that the computers were used by curriculum heads instead of integrating technology into the teaching–learning process.

According to the Principal A, the rural nature of the school community has a major impact on the leadership of principals. According the principals, increased levels of

unemployment resulted in poverty. For example, when interviewed the principal from school A explained:

> They come from very poor background. So, we are really concerned about finance. It's very difficult to get financial support.

This school also has discipline and behavioural problems such as child abuse, behavioural problems and sexual offences. According to the principal, most of parents are busy with the farming activities, where parents have to leave home early in the morning and return late in the afternoon, so there is very little time left for them to monitor their children's after school work. As a result, the children become victims of child abuse due to less monitoring by busy parents. Commenting on this issue of student discipline, for instance, the principal of School A shares her concerns in the following way:

> For, discipline problems, we have, a lot of discipline problems. In the previous years most of our students have been victims of child abuse or sexual abuse from home and from grandparents. Especially form 3′s.. with their grandfathers. We have cases of sexual offences in the hostels and apart from the hostel cases; we have cases from the village. For the girls... it's their dads.

Problems such as child abuse, behavioural and sexual offences can be substantial barriers in participation and engagement in school. The problem can be exacerbated in the absence of welfare support, such as school counselors to provide counselling and guidance to the students in need.

Discussion

The aim of this study was to explore principals' perceptions of the challenges they faced in demonstrating collaborative leadership practices in Fijian rural high schools. The analysis of the research findings indicates that the principals supported the view that greater involvement of the parents and community in the education of their children is paramount, yet empirical evidence provided variances in their direct involvement or engagement in school activities. Some of the principals mentioned that due to lack of time they were not able to reach out to the families while others reported that funding was a major factor in reaching out to the communities. Ironically, two principals were simply not in favour of moving out of their schools. Instead, they expected the parents to directly communicate with the school. Most of the principals interviewed reported that apart from being the school principal, they did not have any other role in the community. In contrast, Barley and Beesley's (2007) study revealed that the rural principals believed it was important that they interacted with community members outside of school hours. They also observed that supportive relationships with families were strongly associated with the success of rural schools. These principals believed that their community involvement aided teacher retention and helped create a feeling of trust and support between the community and the school. Not only

are rural principals accountable to school district policies, they are often indirectly held accountable to the well-being of the entire school community (Auerbach 2010; Budge 2006; Clarke and Stevens 2006; Clarke and Wildy 2004; Harmon and Schafft 2009).

Lack of parental and community involvement in Fiji's education system is closely tied to a legacy of colonial administration, which never sought their input. However, parents can do much to make children's out-of-school time complement and enhance their formal instruction. Children appear to do better in school when parents provide predictable boundaries for their lives, encourage productive use of time and provide learning experiences as a regular part of family life (Redding 2000). Within families who work on their daily routines following calendars, schedules, grocery lists, shared household chores, reading, studying, and playing mentally challenging games, children may more easily adapt to the responsibilities of school. The disadvantages of poverty, particularly in rural areas, may be mitigated by such conditions for learning. For instance, Redding (2000) reported that high achieving students spend about 20 h each week outside of school in constructive learning activities, particularly with the support and guidance of parents or other family members. In this regard, it is vital for school principals and teachers to design and offer a variety of educational programmes that can cater for rural school students beyond normal school hours. Encouragingly, effective school-community partnerships would then be able to use the resources in the community to help and support children's learning in small cohorts in their villages. Their learning could be extended study sessions to include doing homework, reading and discussion of academic-related work.

Yet, with regard to rural principals, the literature on community involvement highlights that rural school leaders sometimes view parents, community interest, and/or community values as a barrier to improving student academic achievement (Arnold et al. 2005; Budge 2006; Corbett 2007; Larson and Howley 2006). However, parents' support for exploring and working together with their children on school work, hobbies and their leisure activities multiplies the school's efforts to effectively develop a child's talents and interests. On the other hand, children appear to benefit when their parents maintain contact with their teachers and monitor their study time. Taking a regular inventory of a child's daily and weekly schedule provides valuable information to parents on how time is being utilised to include activities that are of interest to their children. While maintaining the importance of academic-related work, recreational and social activities, of course, should become a regular part of a child's life. In addition to monitoring children's learning at home, as discussed in the preceding section, a variety of education programmes are needed to teach parents how to enhance the home environment in ways that may be beneficial to their children's learning.

Because parents are their children's first and, perhaps most important teachers, educators might well inform them of their children's progress in school and share ideas about specific practices that can help them at home, such as providing a quiet place for reading and homework and discouraging them from watching unconstructive television. Parents may benefit from greater knowledge of home practices that promote their children's learning before and after the school day. Students may

also benefit from communication between their parents and their teachers that flows in both directions. Additionally, students appear to show higher levels of achievement when parents and teachers understand each other's expectations and communicate regularly about the child's learning habits, attitudes towards school, social interactions, and academic progress. For this reason, rural school principals may help children by reaching out to their parents and informing them of practices that appear to help children at home and in non-school hours. Rural schools' efforts to maintain a healthy school-community partnership requires the commitment and support of all stakeholders. However, the findings of this study showed that principals faced challenges related to community commitment towards schools' goals that enhance students learning outcomes and improvement. To overcome these challenges, principals need to be professionally prepared in collaborative leadership.

Future Directions

Knowledge about school-community collaboration is a developing area of research and practice. While high-quality school leadership is essential for large-scale education reforms that can lead to sustained improvement in student learning outcomes, sustainable education reforms and improvement in student performance in a complex rural school require principals to make an effort to change their practice (Levin 2012). The findings of this study provide clear evidence of the significant challenges faced by principals in their efforts to support and engage the wider community in learning and teaching in rural schools in Fiji. Given the grave challenges encountered by the principals in this study, it is argued that specific-skills training and development in collaborative leadership have the potential to address the unique problems faced by rural school principals in working to build sustainable effective school, family and community partnerships.

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Chapter 15
Conclusion: A Collection and Collaborative Effort!

Jeremy Dorovolomo and Govinda Ishwar Lingam

Abstract These chapters have provided critical reflections of educational issues in various countries in the Pacific Islands, mainly those of Fiji and Solomon Islands. This is pertinent as there is need for ongoing scrutiny of educational practices in order that responsible professional practice occurs in Pacific educational settings. Fook (Social Work with Groups 35:216–234, Fook, Social Work with Groups 35:216–234, 2012) states that there are two elements of critical reflection. The first entails uncovering, examining and changing deeply held assumptions. The second involves an awareness of how power is at play in order to create changes in practitioners' situations (Fook in Social Work with Groups 35:216–234, Fook, Social Work with Groups 35:216–234, 2012). This edited book encompasses the former element of critical reflection, by examining the underlying assumptions, for instance, in mathematics education, or the role of school leaders. Moreover, it also examines the manner in which relational dynamics are at play, for example, between the school and its community, the school principal, staff and pupils, or the school recess as a gendered space. Burnett and Lingam (Review of Education 53:303–321, Burnett and Lingam, Review of Education 53:303–321, 2007), in the Pacific Islands context, emphasise that critical reflection is important to rethinking the purposes of education in the Pacific region. They further stress that in the rethinking process, teachers need to be included, as often they are excluded and silenced, and governments, agencies and interest groups conceptualise and dictate what their work should be Burnett and Lingam (Review of Education 53:303–321, Burnett and Lingam, Review of Education 53:303–321, 2007). This edited book ensures the voices of teachers, parents, children, education authorities and school leaders are being heard so as to provide a more balanced view of education in the Pacific Islands contexts from as many stakeholders.

Keywords Pacific islands · Bricolage · Novel insights · Supportive policies · Research culture

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McLeod (2007) recommends that "training will play a role in Pacific leadership, be it in training of leaders and emergent leaders or the training of school and university students" (p. 34). Lingam and Lingam, who contributed three chapters on school leadership to this book, have consistently advocated for targeted leadership training for intending Pacific Islands school heads, as it has potential to improve leadership practices and for it concomitantly influences upon school effectiveness and improved student learning (Lingam and Lingam 2014). It can therefore help school leaders better meet the demands of their work (Lingam 2011) and to be better able to cope with inevitable changes (Pallota and Lingam 2012). Moreover, leadership training can help fill gaps that individuals often find in their capacities as school leaders (Lingam and Lingam 2013), which is increasingly a need in small island states of the Pacific (Lingam 2012). In this edited book, Lingam, Lingam and Colleagues in Chaps. 1 and 2 have extended their conversation on school leadership by encouraging leaders to be able to design and implement viable improvement plans and lead the way and enable others to act towards common agendas. In addition, Lingam and Lingam in Chap. 13 have also emphasised the need for school leadership to consciously forge strong collaborative initiatives for the benefit of students. Dorovolomo, in Chap. 12, asserted that positive projects and initiatives can occur in schools such as building staff houses, encouraging staff development or finding creative ways of dealing with student indiscipline. Wairiu, in Chap. 3, also added that these can be achieved with effective and transparent communication between school leaders, teachers, parents and the community the school serves.

Fito'o emphasised in Chap. 11 that policies must be enabling in order that school leaders and schools are empowered to continually instigate positive changes. Fito'o and Dorovolomo also proposed in Chap. 4 that positive changes could be made by re-visiting various national curricula, as to whether they are relevant and current, and furthermore, according to Varani in Chap. 8 whether it is culturally relevant. Also, Dorovolomo and Fito'o in Chap. 5 further proposed re-visiting the teacher education curricula and national Pacific curricula, to understand whether these are doing enough to include elements of citizenship education, thereby allowing students to interact with experiences and activities at school which can support them in making correct decisions, taking moral and ethical choices and becoming fruitful citizens. Another priority area this edited volume has emphasised is that put forward in Chap. 10 by Totaram, Raghuwaiya, Chief and Jokhan concerning the potential of technology-enhanced learning activities for students in a fast-changing technology environment. This is also pertinent in a teaching environment, which, as Dayal and Lingam in Chap. 6 expressed, could still be very chalkboard oriented and pedagogy teacher-directed in order to cover a congested syllabi and prepare students for national examinations. Consequently, Dorovolomo in Chap. 7 highlighted that pupils are increasingly kept at school for longer hours and shorter break times, thus underestimating the importance of recess periods for children as a valuable learning space.

Chapter 9 on co-authorship and collaboration in research by Dorovolomo and Dakuidreketi is imperative and underpins what this edited book, in itself, is. This book is a collaboration among all Pacific Islands scholars, and this is noteworthy, as Pacific Islanders need to be writing and publishing more themselves. Dorovolomo

(2010) analysed the journal Directions: Journal of Educational Studies, which is one of, if not the oldest journal at the University of the South Pacific (USP) that began publishing issues in 1978. He found that around 60 per cent of authors are not necessarily Pacific Islanders but mainly those from Australia, New Zealand, the US and the UK. Undoubtedly, the Western world has always written more about the Pacific than Pacific Islanders themselves do, and publishing on Pacific Islands issues should be undertaken by all interested in the region. Nevertheless, Pacific scholars can do more in terms of offering their own writing, reflection and debate about issues that affect them. This is why this present book is significant, being masterminded and written by Pacific Island scholars and contributing to Pacific publication that can have an influence on policy and practice. Dorovolomo (2010) also found that 76 per cent of the articles published in this Pacific journal were single-authored. Again, there is nothing wrong with this; however, there is increasing collaboration and co-authorship today than there was before. Pacific Islanders need to increasingly collaborate within their institutions, across disciplines, across Pacific countries and globally.

Thus, Dhand et al. (2016) stress that "academic collaboration is critical to knowledge production" (p. 1) and contributes to increased grant and publication networks and ultimately improved outputs. Fagan et al. (2018) add that to encourage research collaboration, it is important that institutional policies promote interdisciplinary research and collaborative networks and that required resources and infrastructure allow these to occur. Besides increased collaboration and a supportive policy environment for research innovation, the introduction of incentive and reward systems has seen burgeoning research productivity in many universities worldwide (Finn and Hanssen 2018). Research at USP, an institution established in 1968, has also come a long way. For instance, in 1970, USP had only three publications compared to more than 200 in 2016 (Vanualailai 2016). The increase in USP research outputs since 2012 has been the result of the introduction of staff and student incentives and awards for quality publications that are rated A*, A and B, based on the Excellence in Research for Australia (ERA) and the Australian Business Deans Council (ABDC) rankings. Significant in 2012 was also the establishment of the USP digital repository to capture, promote and disseminate USP research (University of the South Pacific 2012). The research repository, in addition, measures research productivity and identifies those that are research active and those that need support (Tamani 2017). Therefore, the collaborative effort put into this edited book is an imperative demonstration of building research alliances and productivity.

This is the second book emanating from the USP School of Education seminar series. The previous edited book, *Discussions and Debates in Pacific Education* (Dorovolomo et al. 2014), and now this present volume are both bricolage in nature, that is, "an assembly of readily available elements" (Boxenbaum and Rouleau 2011, p. 280). Both volumes are assemblages of the thoughts of those who presented in the USP School of Education seminar series, who have contributed chapters and have provided representations of education in the Pacific Islands. Assembling readily available chapters in a bricolage may be seen as a weakness, but we would argue that it is not, because editors as "bricoleurs" (ibid, p. 281) collected articles with the

potential to generate new knowledge and conversations about Pacific education, and it has to be said that not all submitted articles were accepted. This has therefore been a careful collection, and being bricolages, both edited books provide chapters that are "based on contextual factors, such as local constraints on knowledge production, practical value, and their potential for generating novel insights" (ibid). It is hoped that this second edited book provides a collection of ideas that can be utilised to create novel ideas to respond to Pacific situations and realities in a given place at a particular moment in time, and beyond.

The first edited book was invited from presenters 1 to 50 in the seminar series, while the second was drawn from presenters 51 to 100. When the seminar series reaches 150, the third book in the series will be called. This is one of the vehicles the USP School of Education uses to promote a culture of research and publication. The USP School of Education also organises staff and student research symposia, awards evenings, convenes conferences and maintains an academic journal, among other strategies, to encourage a culture of research and publication. Authors to this edited book are mostly from the USP School of Education, including its thesis students and a few from other sections of the university. The editors to this book are the Chair of the USP School of Education Research Committee and the Head of School, respectively, and together, they have attempted to ensure that promoting a research culture is not an accident but based on deliberate strategies and collaborations to support the research missions of individual academics, the school and university. One of the USP's research objectives is to "Strengthen the university as the Pacific hub for research and innovation" (University of the South Pacific 2019), and this book provides the research leadership at the school level in contributing to building a research culture.

We live in a global village, and there are various interconnections in education, the global economy, multicultural issues, international security, combating both communicable and non-communicable diseases and ecological sustainability, to name a few issues that are areas of concern world over. Pacific Islanders would increasingly be citizens of their countries and the region, but to also be global citizens. On the other hand, even though explorers have proved that the world is a globe rather than flat, there is often to a large extent limitation to thinking around the tribe, local, province and neglecting the global. As much as the Pacific Islands can learn from the globe, the globe can also learn from us, whether it is from the global north or from south-south cooperation and relationships. Lewis (2017) accentuated that traditionally, the global north is seen to be richer and knows better than the developing world and as such transfers rather than exchange of policies, methodologies and ideas occurs. The global north should get rid of the "outmoded cognitive map" (Lewis 2017, p. 327) of this binary thinking of the developed world as being givers and developing countries as recipients. The reason is that the world is changing so rapidly with complex patterns of interaction with the worlds' major issues, for instance, in poverty, climate change, diseases and changing financial orders, among others, that both the north and south can learn from each other. Lewis (2017) highlighted that sources of international aid have also not only originated from the west but other countries such as China, South Korea, the gulf countries, for instance, thus there is a lot more players.

Thus, this book believes that the south needs the north and the north needs the south, besides north–north and south-south development relationships. Although scales of disadvantage would be different among the north and south, learning across boundaries is a good idea and others can potentially derive useful information and ideas from this collection of chapters and conversations.

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