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An analysis of recent Pasifika education research literature to inform improved outcomes for Pasifika learners

Report to the Ministry of Education

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JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH
Te Puna Rangahau ki Ako Pai

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Cherie Chu
Ali Glasgow
Fuapepe Rimoni
Mimi Hodis
Luanna H. Meyer

January 2013

Preface

The impetus for this literature review came from a Working Group[1] established in February 2011 by the Pasifika Education and Research and Evaluation teams within the Ministry of Education. The Working Group comprised members from each of these teams as well as representatives from universities and other government departments.

The Working Group was set up to establish priorities for Pasifika education research in Aotearoa New Zealand. The aim was to develop a collaborative, coordinated approach to gathering quality research knowledge towards improving Pasifika presence, engagement and achievement in education. The work was guided by the principles within *Teu Le Va — Relationships across research and policy in Pasifika education* (Airini, Anae, et al., 2010) which emphasise the fostering of respectful, collaborative relationships between researchers and policy-makers and the Pasifka education community.

The Compass for Pasifika Success in the Ministry of Education's then current *Pasifika Education Plan 2009–2012*[2] identified five key areas for improvement (levers for change). The key areas identified were: literacy and numeracy; families and community engagement; governance and leadership; transitions; and effective teaching [and learning].

Members of the Working Group collectively agreed that these five key areas were an important starting point for its work to establish research priorities, while at the same time acknowledging that ongoing consultation with Pasifika parents, families and communities, a revised *Pasifika Education Plan*, and other sources of information may well mean changes to the key areas for Pasifika education research in the future.

The Working Group recommended that a critical analysis of the Pasifika education research literature over the last 10 years would be a valuable resource to complement its programme of work to establish Pasifika education research priorities. It was proposed that any review of the literature should focus primarily on the five key areas. This would ensure that the review would be strongly linked to the wider work of the Working Group, and also support the vision for Pasifika learners of the *Pasifika Education Plan 2009–2012*.

It was further agreed by Working Group members that the literature review should build on the knowledge and understandings reported in an earlier review (*Literature Review on Pacific Education Issues*, Coxon, Anae, Mara, Wendt-Samu, & Finau, 2002). This would then enable comparisons to be made about the nature and extent of Pasifika education research findings up until 2002 and what is available today, 10 years later.

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1 More about the Working Party and its work is given in the document *Pasifika Education Research Priorities: Using research to realise our vision for Pasifika learners*, Ministry of Education, 2012. www.educationcounts.govt.nz/publications/pasifika_education/107996

2 The *Pasifika Education Plan 2013–2017* was released in November 2012.

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Section 1: Executive summary

This review of the literature highlights and clarifies key evidence towards improved learning and achievement outcomes for Pasifika learners and identifies priorities for future research in Pasifika education. Specifically, the report is a critical analysis of the Pasifika education literature since 2001 to:

- build on important findings identified in the Coxon et al. (2002) Pasifika education research literature review
- identify important gaps in our research-based knowledge about strategies to attain improved learning and achievement outcomes for all Pasifika learners in Aotearoa New Zealand
- suggest future priorities for research that can be used to inform policy and practice to achieve the best possible educational outcomes for Pasifika learners in Aotearoa New Zealand.

The review of the literature was guided by the report of the Working Group on research priorities for Pasifika education (Ministry of Education, 2012) and the *Pasifika Education Plan Monitoring Report 2009* (Ministry of Education, 2011). This present report includes:

- A critical analysis of the evidence for five 'areas for investigation', with a view towards potential contributions to policy and practice in Pasifika education. These areas were identified as key areas for improvement in the Ministry of Education's *Pasifika Education Plan 2009–2012* and used by the Working Group mentioned above as the basis for developing a set of research priorities. These five topical areas are: governance and leadership; families and community engagement; literacy and numeracy; effective teaching; transitions.
- A summary of the extent to which sector information gaps and recommended research priorities identified by Coxon et al (2002) have been addressed since their review. The sectors are: early childhood; primary; secondary; tertiary.
- Identification, for each of the topical 'areas for investigation', of: (a) significant information gaps; and (b) research priorities to address identified information gaps and build on key findings from research to date to inform policy and practice for improved Pasifika education outcomes.

The report is designed to be responsive to Ministry of Education requirements but also to be useful and accessible for a range of other audiences. Other audiences who hold key stakeholder roles in Pasifika education include policy developers, teachers in each of the sectors (early childhood, primary, intermediate, secondary and tertiary), teacher educators, experienced and emerging educational researchers including Pasifika researchers, and Pasifika parents and other interested community members.

Evidence over the last 10 years to support policy and practice

The overall aim of the project was to review and summarise recent (2002–2012) empirical evidence that could contribute to the development of educational policy and practice to enhance Pasifika learner outcomes. Highlights of the key findings of the research literature reviewed are summarised below.

1. **Governance and leadership**: In the early childhood, primary, and secondary sectors, insufficient attention has been paid in the research literature to governance and leadership to improve Pasifika outcomes. The Education Review Office (2012) noted that of the schools they reviewed and judged to be most effective, less than half provided any report to their Board of Trustees on Pasifika student achievement, only a few offered

Pasifika languages and culture as subjects, none conducted analyses for effectiveness with Pasifika students, and few were aware of and using the (Ministry of Education's) *Pasifika Education Plan*. McNaughton and Lai (2009) found that when school leaders and teachers actively and effectively use student achievement data as the basis for designing problem-solving approaches to support students and prioritise professional development for staff, the impact on student outcomes is positive. In the tertiary sector, there is some qualitative evidence of effective mentoring approaches for enhancing Pasifika educational leadership.

2. **Families and community engagement**: There is anecdotal and qualitative research evidence that engagement and partnerships with Pasifika families and communities are crucial to support educational achievements of Pasifika learners. Formal evaluation evidence of impact on outcomes is lacking, but model descriptions are available for various initiatives at early childhood/primary levels connecting with church organisations, and secondary school Pasifika clubs connecting with particular Pasifika communities.

3. **Literacy and numeracy**: There is evidence of enhanced literacy and numeracy outcomes for Pasifika children in the primary years through well-planned bilingual educational approaches that enable children to learn across the curriculum in their Pasifika language alongside learning English, rather than requiring them to learn in English. This research reflects rigorous research design criteria and is consistent with parallel research internationally. At secondary level, coursework offerings focused on Pasifika culture utilising unit standards and disproportionate streaming of Pasifika students into unit standards-based coursework may disadvantage Pasifika learners who lack opportunities to attain Merit and Excellence on the NCEA (National Certificate of Educational Achievement) and demonstrate less than optimal motivation orientations. There is some evidence that a motivation-enhanced homework and study skills programme is associated with higher achievement on the NCEA compared with a traditional programme.

4. **Effective teaching**: Widespread consensus is evident among educationalists in New Zealand that culturally responsive pedagogies are important to support learning, but the focus of research in this area has been primarily on Māori rather than Pasifika. In early childhood, teacher understandings of key Pasifika cultural conceptions are regarded as essential for Pasifika children's learning. At secondary level, there is evidence that Pasifika students—more so than other cultural groups—report being more motivated when their teachers show they care about their learning (going beyond caring about them personally). There is promising though limited evidence that targeted academic counselling, including goal setting, is related to successful secondary school completion. At tertiary level, students report valuing culturally responsive approaches and support systems, but there are no long-term studies of the impact of these on retention, grades, and graduate outcomes. Across all sectors, research on the impact of linkages with the family, home and Pasifika community to support Pasifika student learning is absent. There is a dearth overall of research focused on effective teaching for Pasifika students who are gifted and for those who have disabilities requiring special education services and supports.

5. **Transitions**: Transition support for bilingualism is related to both Pasifika language maintenance and positive transition experiences in the early primary years. Although the evidence for Pasifika is limited, smooth transitioning from early childhood settings to primary school has been related to factors such as systematic planning for transition, valuing of Pasifika languages and culture, and strong connection between educators and the home/community. Major research from the University of Auckland's Starpath Project has identified a series of stepping stones and stumbling blocks that have impact on the transition from secondary to tertiary study, including evidence of the effectiveness of targeted academic counselling with goal setting for this transition. Career awareness initiatives have also been shown to enhance post-secondary choices.

Significant information gaps and identified research priorities

The present review also highlights that significant information gaps which were previously identified in the Coxon et al. review (2002) continue to be evident in 2012.

Establishing research priorities to address gaps in our knowledge is an important step towards improving outcomes for all Pasifika learners through more informed policy and practice. This review therefore presents a series of suggested priority research topics to address the information gaps highlighted by Coxon et al. (2002), as well as other information gaps identified by the present review. While the more specific recommendations are documented in the main body of this report, the following provides a summary overview of identified research priorities in relation to student outcomes data, and each of the five broad topic areas referred to earlier.

- **Student outcomes data**: There is an overarching need to establish access to good data on student performance—a challenge across all educational sectors. Educational initiatives for Pasifika (as for all children and youth) cannot be evaluated properly without good data on student outcomes as a function of those initiatives. Evidence gained from valid and reliable measures of educational outcomes is essential for research and evaluation towards identifying factors related to enhanced outcomes. We need valid and reliable measures of student achievement across the school years, enabling schools to accurately track the progress of individual students and to report their achievement data longitudinally. Currently, there is little consensus regarding which measures should be used and schools often lack expertise in the use of existing data management systems to adequately monitor achievement and other outcomes for individual students to complement the primarily broad-based, large (ethnic) group statistics typically available. This is an urgent issue if we are to ensure that research involving student progress and achievement will provide a sound basis from which to make decisions leading to enhanced educational outcomes.

- **Governance and leadership**: There is urgent need for research on culturally appropriate ways of involving Pasifika communities in governance and leadership across all sectors. This is particularly important for Pasifika where the role of the family and the Pasifika community has a strong impact across all aspects of children's lives. Identified inequities in NCEA offerings and choices across secondary schools have implications for aspects of governance and leadership in educational organisations if outcomes for Pasifika students are to be improved. Rigorous research evidence on the learning and other outcomes for Pasifika students taught in bilingual settings is urgently needed to support the development of government policy on Pasifika bilingual programmes and initiatives and also policy and practice within bilingual settings. Research is also needed on approaches for engaging Pasifika leadership as partners in the educational process at all levels.

- **Families and community engagement**: There is urgent need for validated organisational approaches for home–school–community engagement and for the development of individual teacher knowledge, understandings and use of culturally responsive approaches to promote positive connections to family and community for Pasifika. Further research is also needed to identify Pasifika parent aspirations for their children and to ascertain how best to ensure that Pasifika families gain the knowledge and understanding that will enable them to provide sound input regarding their children's academic and career choices. In addition, there needs to be research to provide transparency regarding the disproportionate placement of Pasifika students into low streams and unit standards-based coursework at secondary level. Such transparency is necessary if parents are to be enabled to contribute to ensuring higher goals and aspirations for their children's educational opportunities and achievements.

- **Literacy and numeracy**: Consideration needs to be given to extending research beyond a focus on what contributes to positive literacy and numeracy achievement outcomes for Pasifika, to investigating their achievement in other domains, across sectors and subjects. Subject-specific literacy (and numeracy) is also a

relatively neglected area of investigation, despite conventional wisdom that this could enhance performance in other subjects on the NCEA, for example. More research is needed regarding culturally responsive pedagogies and bilingual models consistent with educational policy to enhance outcomes for students who enter educational settings speaking English as a second language or speaking only a Pasifika language. There is urgent need for research which includes validated achievement and achievement-related measures of educational outcomes across the curriculum for Pasifika children: until now, there has been little systematic and reliable information regarding student achievement until late in young people's school careers—their senior secondary years, thus severely limiting potential for improving educational outcomes and limiting the usability of research findings to inform policy and practice to this end.

- **Effective teaching**: Research is needed on culturally responsive pedagogies at the early childhood, primary, intermediate and secondary levels and on culturally appropriate teaching and learning strategies that can be incorporated into tertiary and university level programmes and degrees. Formal evaluation against agreed goals should be required for implementation of educational initiatives and new programmes, with the standard of evidence raised from the current over-reliance on experiential knowledge and anecdote rather than data on student outcomes. Usable data systems are needed that can provide teachers in centres and schools with current and longitudinal data on individual students to assist them in planning and problem-solving to support improved educational outcomes. Research is needed to provide guidance about effective mechanisms for teachers and parents to work together on academic planning and educational goal setting to maximise student outcomes. Key characteristics of effective tertiary programme supports need to be based on research evidence rather than historical practices or deficit theorising.

- **Transitions**: There has been recent work on transitions generally that is helpful in understanding important aspects of the various transition points for all students, including Pasifika. However, this research has not specifically investigated transition experiences for Pasifika children, and research is needed at all levels with respect to factors that lead to successful transition for Pasifika students to the next level of education and towards future careers after leaving school. In early childhood specifically, information is needed on factors that can be influenced by centres that are associated with successful transitions from language nests to mainstream primary schools. In the school sector, the impact of the nature and extent of subject and qualification pathways requires further investigation in light of Pasifika children's overrepresentation in low-quintile schools that tend to be smaller than and thus offer fewer subject choices in comparison with high-quintile schools. At least some proportion of this research needs to shift from reports of stakeholder perceptions about programme impact to evidence of student outcomes including retention, grades, and educational completion.

Section 2: Method

Materials judged to be directly relevant to the New Zealand context and published since 2001 (ie, from 2002–2012) were identified for the literature review. To identify materials for the literature data base, our research team worked closely with the professional librarian from Victoria University who has specialist expertise on Pasifika subjects. This specialist subject librarian supervised a research assistant who was selected for this task and trained specifically to source interloan materials either not accessible from our host university or not available in electronic format. To guide this process, the principal investigator Dr. Cherie Chu and research team member Dr. Mimi Hodis held regular meetings with both the specialist librarian and research assistant to update the search process.

Inclusion of publications in the review

The purpose of the review is to summarise evidence across a ten-year timeframe regarding approaches associated with educational outcomes for Pasifika learners, which implies a standard or criterion for inclusion in the review as "evidence." Our criterion for evidence is the internationally recognised standard of quality assurance with independent editorial peer review.

This means that materials sourced for this review are those published during the review timeframe that met national and international standards for quality assurance and peer review. Quality assurance requirements were consistent with those published as guidelines for New Zealand's Performance-Based Research Fund assessment of research outputs and according to the editorial review process used by major international journals and book publishers, with a fundamental requirement for independent editorial peer review. All published materials for which there was evidence of independent peer review as part of a transparent editorial process were reviewed.

Thus, materials we reviewed include journal articles; published conference proceedings; book chapters; books; postgraduate theses (masterate and doctorate levels); and externally reviewed published government reports meeting the stated criteria. Both online and in-print publications were included, provided they met the criteria for quality assurance and independent editorial peer review. Excluded from this review were in-print or electronically available materials lacking independent editorial review and quality assurance, such as self-published monographs or papers, in-house working papers, PowerPoint presentations from conferences without published proceedings, unpublished government or agency reports, and lectures from workshops or coursework at tertiary institutions.

Publication timeframe for review materials

As instructed according to the Request for Proposals (RFP), the data base for this review comprised literature published during the past 10 years (2002–2012) including all publications available in the public domain such as journal articles, book chapters, master's and doctoral theses, government/agency reports, and so on, as described above.

Search process and terms

The process of finding key sources included utilisation of electronic searches of relevant comprehensive databases, including ERIC, EBSCO, PsychINFO, Scopus, and Google Scholar.

Key words employed in searching for relevant materials and resources included: Pacific, Pasifika, Pacific Island/er, Pacific people, Pacific education, as well as terms for each sub-group Pacific culture (Samoan, Tongan, Niuean, and so on). Cultural group terms were used in conjunction with the following key phrases: tertiary education, higher education,

universities, polytechnics, wānanga, private training establishments; Aoga ‘Amata, language nests, early childhood education or centres (ECE), families, aiga, fanau; secondary schooling; Pasifika school liaison; multicultural; alternative, students at risk; English as a second language teaching; special education, disabilities, giftedness; governance, leadership, management; organisational culture; boards of trustees; civic education, citizen education; literacy, numeracy; language development; language maintenance, preservation of languages; teaching and learning; teacher knowledge, skills, teacher–learning pedagogy; transitions; mentoring; adult transitions; community engagement, home-school partnership; development, empowerment, and social justice.

While we cannot guarantee that all relevant publications were sourced and included, this report represents our best endeavours to ensure representation of all published materials that could be located within the public domain for direct scrutiny within the timeframe for the review. This included a sizeable number of master’s and doctoral degree theses that were sourced through interlibrary loan from New Zealand tertiary libraries as well as virtually all published reports available through Victoria University’s comprehensive publications database and subscription services. Confidential materials that were not available in the public domain are, therefore, not covered by this review.

Pasifika education research materials deemed not to be directly relevant to the review focus on *Pasifika education research literature to inform improved outcomes for Pasifika learners* were also not included in our review. As well, a very few materials were excluded if a subsequent publication that was more readily accessible was available for the review. Also, in a few instances a publication was excluded if it was a non-substantive opinion piece that did not reference any evidence or documentation for stated opinions.

Tables 1 to 5 report the full list of all materials incorporated in the review, and full citations for each of the publications are included in the reference list at the end of this report.

Reviewer role and responsibilities

Three members of the research team are Pasifika scholars, and all researchers participating in the review have significant research experience focused on issues of diversity and culture. The team also includes expertise in educational evaluation, research design, measurement of learner outcomes, and the conduct of literature reviews (both narrative and meta-analytic).

Each member of the research team took major responsibility for the summary and analysis of the literature for one of the four sectors—early childhood, primary/intermediate, secondary, and tertiary—based largely on holding specialist expertise in that particular sector. Guided by the age range and sector focus of the publication, materials sourced for the literature review were read in their entirety by at least one member of the research team and many of the materials were reviewed by two or more researchers. Consultation across team members determined final decisions regarding inclusion or exclusion of materials for the review, with the team choosing to favour inclusion rather than exclusion.

Section 3: Findings from the Pasifika education research literature under five key topic areas

The review of the literature was guided by the report of the Working Group on research priorities for Pasifika education (Ministry of Education, 2012) and the *Pasifika Education Plan Monitoring Report 2009* (Ministry of Education, 2011). Thus, this present report includes critical analysis of the evidence for five 'areas for investigation' with a view towards potential contributions to policy and practice in Pasifika education as identified in the Ministry of Education's *Pasifika Education Plan 2009–2012* and used by the Working Group mentioned above[3] as the basis for developing research priorities.

This section highlights and clarifies key findings from the literature review of Pasifika education research on educational outcomes for Pasifika in five topical areas:

1. Governance and leadership
2. Families and community engagement
3. Literacy and numeracy
4. Effective teaching
5. Transitions

The purpose of the review was firstly to identify key findings that could inform policy and practice for improved outcomes for all Pasifika learners, and, secondly, to identify important information gaps as a basis for establishing priorities for future research. For each of these five areas, the literature review summarises current findings, updating findings identified in the Coxon et al. (2002) review of the Pasifika education research literature 10 years earlier. The review also summarises new research findings regarding the effectiveness of strategies designed to attain improved learning and achievement outcomes for all Pasifika learners in Aotearoa New Zealand.

The research is summarised in a manner designed to be responsive to Ministry of Education requirements but also to be useful and accessible for a range of other audiences. Other audiences who hold key stakeholder roles in Pasifika education include policy developers, teachers in each of the sectors (early childhood, primary, intermediate, secondary and tertiary), teacher educators, experienced and emerging educational researchers including Pasifika researchers, Pasifika parents, Pasifika communities and networks, and other interested community members.

Introduction to the findings

Findings from the literature review are summarised in Tables 1–5, with each table covering literature relevant to one of the five key topical areas. Most research-related publications are reported in the one specifically relevant table, but in some cases a study will be included in more than one table depending on the topical areas covered by the publication.

[3] The Preface to this report provides a brief overview of the Working Group.

Each of the tables provides an overview of individual publications related to that topic, starting with the citation (linked to the reference list at the end of the report), followed by the focus of the publication, the age range, Pacific culture/s covered, and a brief narrative overview of the publication.

The final section of each table indicates the 'type of report and evidence', designating one of five categories. Discussion or theory papers are those that report a particular theoretical position, discussion of ideas, or opinion. Some of these papers do also include citations of the literature, but if a publication is nevertheless categorised as a discussion/theory paper, this means that citations were selective to support a particular line of argument or theoretical approach rather than representing a systematic literature review. Reviews, on the other hand, are comprehensive and systematic in method, and these could be either narrative or statistical though we found no statistical meta-analyses published in any of the five areas (probably reflecting the absence of evidence and reported effect sizes for student achievement).

Descriptive/experiential publications describe a particular programme, and descriptive/statistics publications report particular data, but, in both instances, the project discussed in the report does not include a research or evaluation design that could allow attributing reported outcomes to the intervention or educational setting. The final column in each table is reserved for those studies that employed an appropriate research or evaluation research design enabling findings to be associated with an intervention or approach. We have indicated whether empirical studies are mixed methods, quantitative or qualitative. In addition, whether the report is a postgraduate thesis at master's or doctoral level is also noted.

The tables highlight the increased quantity of research and publications relevant to Pasifika education outcomes in Aotearoa New Zealand. Some positive comments related to the past decade of scholarship in these areas include:

1. The notable increase in both masters level and doctoral level research since the 2002 review, including evidence of increased attainment of postgraduate theses research degrees by Pasifika scholars
2. An increase overall in publications by Pasifika scholars including collaborative work with non-Pasifika scholars
3. That more New Zealand based research is being reported in international journals and other publications, going beyond government reports, websites, and New Zealand-based publication outlets generally
4. There is more research across the different sectors including tertiary education, as opposed to an emphasis upon one or more particular sectors
5. There is some evidence of systematic investigation of the impact of replicable educational interventions in selected areas, including bilingual education, literacy, numeracy, and transition to successful tertiary study.

Nevertheless, several other patterns across these publications continue to limit the collection of sufficient, robust, evidence-based information that could better inform policy and practice towards enhanced Pasifika education outcomes:

1. **Population**: As was signalled earlier in the Coxon et al. (2002) review, the majority of the literature continues to refer to broad 'Pasifika' or even 'Māori and Pasifika' groups rather than providing specific information about the cultural sub-group/s involved in the research. In some publications, Polynesian, Micronesian, Melanesian and even Asian populations are all encompassed by a general term such as 'Pacific', which may obfuscate cultural differences that might be relevant to the provision of the most appropriate educational approaches for different groups of Pacific students and subsequent outcomes.

2. **Focus**: A significant proportion of publications on Pasifika education are not empirical but are opinion or theory oriented, requiring further comprehensive analyses of the research base supporting particular positions or approaches.

3. **Scale**: The majority of research has continued to be relatively small scale with respect to participant numbers, restricted location for the work, and of short-term duration.

4. **Methodology**: The majority of research is qualitative, emphasising stakeholder perspectives about issues in Pasifika education. While relevant and important, this research does not provide evidence of impact on achievement that can be attributed to particular educational policy or practices.

5. **Measurable gains**: With the exception of the NCEA that provides a measure of student attainment in the senior secondary school, there is a lack of validated measures of student achievement outcomes, as well as a lack of use of available measures to assess educational climate, motivation, engagement, and so on. There is little to no evidence that education-related factors such as attendance, retention beyond age 15–16, and behaviour including discipline statistics shown to relate to and affect achievement are being monitored or evaluated across sectors.

6. **Longitudinal evidence of educational outcomes**: There is virtually no information about student achievement outcomes other than short-term impact on assessments in selected domains, and these are largely restricted to literacy and numeracy. With the exception of some evidence on NCEA achievement and motivation orientations, there is no longitudinal research on educationally relevant relationships between school, teacher, curricular, assessment and other intervention factors and student achievement outcomes.

7. **Research commitment**: Other than for mostly one-off and short-term government contracts for specific tasks, there is limited/insufficient research funding available for either investigator driven or policy related research priorities towards systematically investigating policy and practice to enhance Pasifika educational outcomes.

8. **Policy**: Emerging research evidence and community feedback highlight that important issues for Pasifika education within Aotearoa New Zealand are the need to secure support for bilingual education and the preservation of Pacific languages. Development of a strong body of research dedicated to increasing knowledge in these areas is needed to provide evidence that can inform existing policy and practice.

3.1: Governance and leadership

Table 1 provides an overview of reviewed research focused on issues relevant to Governance and/or Leadership across the sectors. We located only 13 publications that addressed governance and/or leadership issues for Pasifika in any meaningful way, which highlights the need for more work in this area. Nearly half of these are postgraduate degree theses, one is an ERO report, three are discussion papers, and only a handful report empirical findings with most of these indicating what is not happening rather than findings associated with positive outcomes for Pasifika learners.

We acknowledge that the terms 'governance' and 'leadership' sit within broad fields of research, which lead to a myriad of interpretations and definitions. For the purposes of this literature review, governance and leadership are defined as the influential relationships and processes that impact on organisational and educational culture which promote success for Pasifika learners. Within the present context of the research, some examples from the literature are: the importance of strong leadership within schools to ensure a strong focus on the learning and other needs of Pasifika students; research relating to school culture; the importance of Pasifika community leaders having the opportunity to contribute to school decision-making; Pasifika parents on boards of trustees (BoTs); successful young Pasifika people mentoring others; and Pasifika communities having the governance and leadership skills to manage the licensing and financial aspects of managing early childhood education centres.

The Education Review Office (2012) report addresses school assessment practices, the extent to which schools were found to be using the Ministry of Education's *Pasifika Education Plan* for educational developments, and whether the boards of trustees had knowledge of Pasifika outcomes at the school. Even those schools judged most effective overall were found to be wanting with respect to activities reflecting educational accommodations and outcomes for Pasifika learners. Only one research report reviewed incorporated evidence of Pasifika student achievement as a function of leadership decision-making: McNaughton and Lai (2009) reported positive effects associated with school-level practice in analysing Pasifika student achievement data to problem-solve interventions and for the design of professional development. Their research is a descriptive and systematic replication evaluation of a school change model across New Zealand schools to enhance reading and writing, demonstrating accelerated achievement for Pasifika and Māori students particularly across years 4–9. A key component of the model is school-level analysis of the evidence towards problem-solving and design of professional development initiatives.

Key findings in the area of governance and leadership can be summarised as follows.

- Evidence (McNaughton & Lai, 2009) indicates that when school leaders and teachers actively and effectively use student achievement data as the basis for designing problem-solving approaches to support students and prioritise professional development for staff, this has a positive impact on student outcomes.
- Tertiary students report that an Appreciative Mentoring approach (Chu, 2009, 2010) to leadership mentoring resulted in enhanced growth and development for them personally.
- The recent research literature available (Education Review Office Report, 2012) revealed little or no evidence of a particular, systematic focus within schools on the achievement of their Pasifika students. Similarly, there was little or no evidence to show that schools were making effective use of, or even accessing, achievement data that could help inform decision-making and practice to better support their Pasifika learners.
- The research shows little evidence that early childhood settings or schools at primary, intermediate or secondary levels have established meaningful governance relationships (as in board of trustees representation) with their Pasifika communities, or leadership linkages to inform policy and practice.

In sum, the available research and other evidence highlights the importance of this very topical area for Pasifika education. At the same time, however, to date there is insufficient research evidence to effectively inform policy and

practice in relation to strengthening governance and leadership processes to ensure good outcomes for all Pasifika learners, across all levels of the educational system.

Based on our review of research findings, we recommend the following priorities for research in the area of governance and leadership:

Priority #1: Research on the effective use of data by schools to problem-solve and plan initiatives to support student achievement and staff professional development.

1.1 Investigation of the use and impact of longitudinal monitoring and sharing of individual student achievement and behavioural data across school years.

1.2 Research on the use of student outcome measures by schools over time to evaluate the impact of selected school initiatives (eg, Pasifika student proportionate representation in low, average and high streams at secondary school over time as a function of particular programmes/projects).

1.3 Effective professional learning and development for school leaders and teachers in the use of evidence for educational decision-making (eg, effectiveness of school disciplinary practices based on data rather than perceptions).

Priority #2: Systematic evaluation of models for effective governance relationships with Pasifika communities to inform relevant policy and practice.

2.1 Comparison of alternative approaches to Pasifika community participation in school governance (eg, in schools with a high proportion of Pasifika student enrolment, comparison study of the impact of Pasifika representation on the board of trustees with impact of an alternative such as a School Pasifika Advisory Group).

2.2 Research on Pasifika community preferences for involvement in governance relationships with early childhood centres and schools (eg, engaging with community via a talanoa process).

Table 1: Governance and leadership in the Pasifika education research literature, 2002–2012[4]

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Chu (2009)	• Mentoring for leadership	• Tertiary	• Pasifika	This study explored mentoring for leadership of Pacific students at Victoria University using an Appreciative Inquiry research approach (Discovery, Dream, Design, Destiny) applied to four case studies—Manaaki Pihipihinga, the Hawaii group, the Pacific Students' Education Leadership Cluster, and One-to-One Mentoring Relationships. Findings support the use of Appreciative Mentoring for personal growth and development of leadership in Pacific students.					Qualitative (PhD thesis)
Chu (2010)	• Leadership	• Tertiary	• Pasifika	This paper is a personal perspective on Appreciative Inquiry (AI) as an approach to leadership mentoring in higher education. The author emphasises the importance of mentoring relationships that build on the protégé's strengths towards enhancing leadership potential for Pacific people.			Description of mentoring approaches		
Coloma (2006)	• Governance and leadership	• Primary • Secondary	• Pasifika	Conceptual analysis and discussion of cultural frameworks for the education of Pasifika students.	Discussion paper				
Education Review Office (2012)	• School assessment practices • School use of the Pasifika Education Plan • BoT knowledge of achievement outcomes	• Primary • Intermediate • Secondary	• Pasifika	This report includes analysis of school factors relevant to Pasifika learners using qualitative data from schools judged most effective (with an overall quality score of 50+). Less than half of these schools provided a report on Pasifika student achievement to the BoT, and when it did occur, it was generally only start- and end-of-year achievement with no monitored goals for achievement. A few schools offered Pasifika languages and culture as subjects, and some used Pasifika learning contexts especially in social studies, music and visual arts. No analyses for effectiveness with Pasifika students were evident. Finally, few schools with Pasifika students were aware of, and using, the PEP.					Qualitative

[4] For an explanation of how the contents of this table have been set out, please refer to pp. 7–8.

Table 1: Governance and leadership in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Kēpa & Manu'atu (2011)	• Collectivity and connectivity principles in education	• Early childhood • Tertiary	• Tongan	This paper discusses the legacy of colonisation resulting in a prevailing pedagogy of individualism and competition in contrast to indigenous values of collectivity and connectivity. The authors reference the marginalisation of Tongan culture in the national diploma for teaching in early childhood and advocate for engagement in Fonua as a partial frame of reference in Tongan.	Position paper with selected references				
Kiang (2006)	• Academic achievement • Bilingual policy	• School-age (year 1–13)	• Pasifika	Provides a brief overview of the historical commitment to Asian-American and Pacific students in the USA and analyses current implications of No Child Left Behind policy and outcomes for student academic achievement, bilingualism, and educational leadership and advocacy.	Critical essay with selected references				
Luafutu-Simpson (2006)	• ECE service provision	• Birth to 5	• Samoan	In-depth interviews structured around a questionnaire with 16 New Zealand-born Samoan parents in Christchurch revealed three major themes important to choices they made for their children: Pasifika early childhood provisions; cultural identity; and the effects of generational changes in parenting styles. One group described as having high social capital made informed decisions regarding accessing Pasifika centres, and another group withdrew their children from Pasifika services and expressed ambivalence about the effectiveness of Pasifika provisions for their children. A third group did not access Pasifika preschool education and reported barriers, including alienation from the traditional Samoan community.					Qualitative (MA thesis)

Table 1: Governance and leadership in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
McNaughton (2011)	• Educational outcomes • School effectiveness	• All levels	• Pasifika	Summary of what works to attain positive educational outcomes for Pasifika with discussion of the risks associated with disproportionate attendance at low decile schools. Author emphasises the importance of opportunities to access high quality early childhood education, resources for families, home–school partnerships in specific tutoring, and larger-scale school reform at both primary and secondary school levels.		Narrative review			
McNaughton & Lai (2009)	• Academic achievement • Reading & writing	• Primary • Intermediate • Secondary	• Pasifika	Description and systematic replication evaluation of a school change model across New Zealand schools to enhance reading and writing, demonstrating accelerated achievement for Pasifika and Māori students, particularly across years 4–9. A key component of the model is school-level analysis of the evidence towards problem-solving and design of PD initiatives.					Formal evaluation of school change model with outcome measures
Ostler-Malaulau (2009)	• School culture and Pasifika cultural capital	• Intermediate • Secondary	• Pasifika	Questionnaires and interviews were employed with Pasifika students, parents, and teachers within a case study framework to investigate understandings and perceptions of their school system experiences vis à vis Pasifika cultural capital. The author argues that a middle school structure and provision of an additional year prior to commencing NCEA would benefit Pasifika students.					Qualitative (MEd thesis)
Petelo (2003)	• Inclusiveness	• Tertiary	• Samoan	Samoan students at the University of Canterbury were interviewed regarding their university study, revealing the four themes of collectivity, resistance, choice, and the ‘ivory tower’ as dominant and interwoven discourses. Recommendations are made for practical initiatives that would make the university more inclusive, moving beyond a ‘barriers’ approach.					Qualitative (PhD thesis)

Table 1: Governance and leadership in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Tongati'o (2010)	• Strategic planning • Leadership	• Primary • Secondary	• Pasifika • Tongan	Retrospective analysis of development of the Pasifika education strategy by the Ministry of Education from 1993–2009, drawing on information gathered through talanoa ako (consultation), ngaahi fekumi (literature review), and ngaahi ngāue (policy stocktake). Key to successful Pasifika educational planning was engagement with students, families and the Pasifika community, as well as placing Pasifika learners at the centre of pedagogy and epistemology.					Qualitative (PhD thesis)
Van Peer (2006)	• Pacific educational aid and development	• Tertiary	• Pasifika	This critical/interpretive review compares Pacific peoples' perceptions of the effectiveness of traditional approaches to educational development and aid in the Pacific, along with their perceptions of the Rethinking Pacific Education Initiative (RPEI) approach.					Qualitative (MEd thesis)

3.2: Families and community engagement

Table 2 provides an overview of reviewed research focused on issues relevant to Families and Community Engagement across the sectors. We categorised 15 publications as having incorporated sufficient information to contribute to what we know in this topical area, surprisingly low given the known importance that Pasifika peoples place upon family and community. With the exception of two studies employing quantitative design aspects (one incorporating a measure of student achievement), all were narrative reviews, essays, or qualitative research reports of stakeholder perspectives. Again, there appears to be a dearth of empirical research that could inform policy and practice regarding effective approaches to family and community engagement.

Key findings with regard to engaging families and communities are:

- Gorinski and Fraser (2006) highlight that more work is needed around the potential of Pacific/Polynesian clubs to demonstrate meaningful connections between schools and their Pasifika communities.
- There is almost no research on models for and the effects of home–school or school community parent liaison initiatives (see Gorinski, 2005) despite evidence from qualitative research that families regard these home–school relationships as crucial for their children's learning and achievement (Cahill, 2006).
- Particularly notable in its absence is the lack of research on relationships and partnerships with families and the Pasifika community in early childhood education, despite an early Ministry of Education-sponsored review of participation by Pasifika in early childhood education that highlighted this issue (Dixon, Widdowson, Meagher-Lundberg, Airini, & McMurchy-Pilkington, 2007) and one study highlighting how teacher education students can be better prepared for parent–teacher partnerships (Hedges & Lee, 2010).
- The ERO (2012) report highlights that among the schools in its most recent review round, virtually no secondary and only a few primary schools report any initiatives in place for engaging Pasifika communities, including connections with community leaders (eg, church).

A number of factors in relation to family and community engagement have been identified by Benseman, Coxon, Anderson, and Anae (2006), recognising that connections between Pasifika communities and tertiary institutions are critical to educational success. Cahill (2006) identified that schools needed to be proactive in bridging the cultural divide between schools and, in this case, the Samoan community. Dixon et al. (2007) noted that growth in Pasifika community capacity involved communities working together to support the establishment of early childhood education services. Hedges and Lee (2010) found that within the Pasifika language nest, parents demonstrated a sense of belonging: value was given to the culture and language skills of parents and families.

In sum, while there is some evidence from research, further research is required in this topical area to help show early childhood education centres, schools, Pasifika communities and others what is involved in effective partnerships between Pasifika parents, families, communities and educational institutions, and the impact these can have on student outcomes. We therefore recommend the following priorities for research in the area of families and community engagement:

Priority #3: Research on models for home–school relationships associated with enhanced student engagement, retention, and achievement.

3.1 Investigation of the impact of educationally focused church liaison activities in ECE/school settings on home–centre/school relationships and outcomes for children.

3.2 Investigation of the impact of school support for sport and cultural activities with a Pasifika focus on home–school relationships and student engagement.

Priority #4: Systematic evaluation of systems for effective relationships between early childhood education settings, as well as schools, and their Pasifika communities, including connections with Pasifika community leaders.

4.1 Investigation of strategies to facilitate family and Pasifika community involvement in effective transitions from early childhood education to primary.

4.2 Investigation of the impact of a more formalised role for Pasifika community leaders on home–centre/school relationships and outcomes for children.

Table 2: Families and community engagement in the Pasifika education research literature, 2002–2012[5]

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Aumua (2008)	• Relationship between tertiary education institutes (TEIs) and Pasifika community	• Tertiary	• Pasifika	An analysis of the reasons for a lack of response from the Pasifika community in West Auckland to invitations to participate in the development of a Pasifika responsiveness strategy called for by the Tertiary Education Commission (TEC). The lack of engagement between Unitec and the Pasifika community in Waitakere City was attributed to complexities and controversial relationships reflecting the issues identified and TEI positions in relation to the Pasifika community.					Qualitative (MEd.Mgt thesis)
Baleinakoro-dawa (2009)	• Truancy factors	• Secondary	• Pasifika	Examines truancy of students enrolled in alternative education programmes. Findings suggest that prevention of truancy requires teachers and schools that empathise with Pasifika culture and offer Pasifika students a more positive learning environment accommodating their needs. Particularly important are initiatives to enable Pasifika parents to become effective partners in their children's education.					Qualitative (MA thesis)
Benseman et al. (2006)	• Degree completion	• Tertiary	• Pasifika	Interviews to identify factors related to successful retention and completion were carried out with: New Zealand Pasifika participants who had completed, not completed, or not studied towards, degrees; tertiary support and recruitment personnel; and with Pasifika community members. Factors relating to the connections between Pasifika communities and tertiary institutions were seen as critical to educational success.					Qualitative

[5] For an explanation of how the contents of this table have been set out, please refer to pp. 7–8.

Table 2: Families and community engagement in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Cahill (2006)	• Home–school relationships	• Parents of children of all ages except early childhood	• Samoan	Interviews with 12 Samoan parents with children in primary, secondary and tertiary education revealed factors they considered important for home–school relationships to support Samoan children's learning and achievement. Parents believed that teachers were largely insensitive to and/or ignorant of Samoan cultural traditions and made little effort to adapt teaching styles for Samoan learners. They objected to sending their children out of school for work experiences, viewing this as depriving them of academic experiences. Schools were viewed as largely racist and discriminatory in treatment of Samoans and the parents found it difficult to engage with schools without proactive efforts by schools to reach across the cultural divide.					Qualitative
Dixon et al. (2007)	• Participation in ECE	• ECE	• Pasifika	This final evaluation report for the Ministry of Education summarises findings regarding participation by Pasifika and Māori in early childhood education. For Pasifika communities, a community development approach involving collaboration between ECE providers and the extended community was related to participation and able to be replicated. An important factor for Pasifika participation was cultural connectedness (linking families and support for language immersion), and use of fieldworkers who were from the same cultural background and were fluent in the family's language. The use of puna as playgroups was also an effective initial step for encouraging families to ensure their child's participation in ECE.					Quantitative and Qualitative

Table 2: Families and community engagement in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Education Review Office (2012)	• School engagement with parents and families	• Primary • Intermediate • Secondary	• Pasifika	This report includes an analysis of the extent to which schools have improved their engagement with their Pasifika communities. Qualitative data from schools judged most effective (with an overall quality score of 50+) were examined for effective practices. Most of these schools had no initiatives in place for engaging Pasifika communities; primary tended to do more than secondary schools. Initiatives included: co-opting Pasifika board members; staff with Pasifika community knowledge or language skills liaising with parents; use of a translator to talk with parents; and using newsletters and report evenings. There were a few connections with community leaders (eg, church).					Qualitative
Gorinski (2005)	• Home–school liaison	• Primary	• Pasifika	This case study report describes a Pacific Islands school community parent liaison project. The project involved a Pasifika community liaison coordinator working across a cluster of four schools, with the goal of improving learning outcomes for Pasifika students and increasing family and community engagement in learning.					Qualitative
Gorinski & Fraser (2006)	• Parent engagement • Home–school partnerships • Pasifika clubs	• Primary • Secondary	• Pasifika	This literature review presents evidence that a continuity of values, beliefs, assumptions and experiences between home and school are crucial to support the educational experiences of Pasifika students and facilitate parent engagement to support children's achievement, rather than the existing monocultural lens that now operates. The influences of Pasifika clubs and 'Polynesian clubs' are also reviewed as demonstrations of connections between school and community.		Narrative literature review			

Table 2: Families and community engagement in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Hedges, & Lee (2010)	• Parent–teacher partnerships	• ECE	• Pasifika	Investigation of outcomes for student teachers from a community placement designed to enhance their preparation for working in partnership with families in early childhood education. Focus group interviews with 13 students revealed varied conceptions of relationships with families and views of the meaning of partnerships that were elaborated by the community placement experience.					Qualitative
Kana'iaupuni (2005)	• Science and scientific knowledge	• All ages	• Hawaiian	Author calls for a strengths-based approach building on indigenous cultural knowledge for Hawaiian peoples, with a focus on the pursuit of science and environmental policy from a Hawaiian worldview.	Essay with selected references				
Kēpa & Manu'atu (2006b)	• Home–school relationships	• Secondary • Tertiary	• Tongan	Description of processes for social network creation and partnership among Tongan parents, their children, and an Auckland school based on indigenous perspectives of knowledge meanings.	Essay focused on concept description				
Luafutu-Simpson (2006)	• ECE Service provision	• Birth to 5	• Samoan	In-depth interviews structured around a questionnaire with 16 New Zealand-born Samoan parents in Christchurch revealed three major themes important to choices they made for their children: Pasifika early childhood provisions, cultural identity, and the effects of generational changes in parenting styles. One group described as having high social capital made informed decisions accessing Pasifika centres, and another group withdrew their children from Pasifika services and expressed ambivalence about the effectiveness of Pasifika provisions for their children. A third group did not access Pasifika preschool education and reported barriers including alienation from the traditional Samoan community.					Qualitative (MA thesis)

Table 2: Families and community engagement in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Manu'atu (2003)	• Home–school initiatives	• Secondary	• Tongan	Description of several initiatives designed to support Tongan learners and their families, including a homework centre, school cultural festival and the Tongan Education Association.	Essay with selected examples				
Ratliffe (2010)	• Home–school relationships	• Primary • Intermediate • Secondary	• Micronesian peoples (Kosrae, Pohnpei, Chuuk, Yap, Palau, Marshall Islands)	Report of individual and focus group interviews with 26 Micronesian adults revealed the importance of understanding and respecting Micronesian perspectives on the interrelationships of people and obligations to family. Based on the interview findings, the author argues that schools and educators must be culturally responsive to these unique issues to design effective programmes for families to support their children's education.					Qualitative
Saminathan (2006)	• Home–school relationships and reading	• Primary • Intermediate	• Samoan	Ten Samoan families participated in this study of recreational reading and homework support systems available to their children aged 10–11. Results on a test of reading achievement correlated with the amount of and encouragement for recreational reading in the home. Culture and religion were important for high levels of reading at home.					Quantitative (MEd thesis)
Spence (2007)	• Effective teaching • Home–school partnerships	• Intermediate • Secondary	• Pasifika	This interpretive synthesis of the literature reviews evidence of effective home–school partnerships designed specifically to enhance Pasifika achievement outcomes. Major emphasis is placed on the need for continuity between home and school, and the report identifies barriers and facilitators to engagement of Pasifika parents in school interactions that support their children's aspirations and experiences.		Narrative literature review			

3.3: Literacy and numeracy

Table 3 provides an overview of reviewed research focused on issues relevant to academic achievement, literacy and numeracy across the sectors. Although the RFP specifically called for review with regard to literacy and numeracy, we have broadened the topical area to include other academic achievement outcomes. There has been significant research on student achievement since the 2002 Coxon et al. review, although findings continue to emphasise literacy and numeracy measured through particular and somewhat narrow foci such as word identification and simple computations, respectively.

As can be seen in Table 3, 61 publications (including 14 postgraduate theses) incorporated sufficient information to contribute to what we know in this topical area across the sectors. There has been considerable progress in investigating factors associated with achievement outcomes in literacy and numeracy for Pasifika. Particularly notable in the table is the rigorous series of studies examining the impact of bilingual programmes for Samoan learners who enter primary school speaking English as a second language or speaking only their first language, Samoan. Also, a publication that provides a wealth of information regarding capacity for the education of Pasifika students is the ERO (2012) report highlighting the kinds of evidence on student outcomes being reported by a large number of schools. This report corroborates other reports that interventions now in place for Pasifika students attending schools are most likely to focus on literacy and numeracy (eg, the Ministry of Education's Secondary Numeracy Project and the Secondary Literacy Project) rather than looking across the curriculum.

An ongoing challenge is that the vast majority of studies reviewed and listed in Table 3 overgeneralise in that they reference "Pasifika" rather than specific cultural sub-groups; where sub-groups are the focus of the research, most involve Samoan children followed by Tongan and then other sub-groups. Only one study identified learners as Fijian-Indian despite the significance of this specific sub-population in certain areas of New Zealand. We are not suggesting that pan-Pacific findings lack all value or usefulness for different Pacific groups, just as we would not suggest that findings across all children—without specifying any particular cultural group—have no relevance. Nevertheless, there are cultural differences across different Pacific peoples, who are not one homogeneous population sample, and cultural factors may have differential influences for different educational approaches. Just as it can be inappropriate to categorise all Pākehā or all Asian groups together, combining all Pacific into one category could obscure important factors relevant to their education.

There were also several reports that focus on language preservation rather than on the impact of particular approaches to language acquisition on learners, especially impact on their achievement in particular learning areas (eg, literacy).

Key findings from the research literature over the last decade with regard to academic achievement, literacy and numeracy are as follows.

- There is empirical evidence that Samoan learners benefit from bilingual programmes enabling them to learn English alongside learning academic skills in their first language rather than having to learn across the curriculum in English immediately (Amituanai-Toloa, 2005; Amituanai-Toloa & McNaughton, 2008; Aukuso, 2005; Spence, 2007; Toloa, McNaughton, & Lai, 2009). It may not be feasible for government to provide bilingual programmes in children's first languages, but there is relatively little research on the kinds of alternatives that could be both practical (eg, the extent to which primary schools have available print materials for children in their first languages) and provide positive support for Pasifika children's language development and overall achievement.

- Given the presence of Pasifika language nests as one model for early childhood education, there is a disappointing absence of evidence regarding the impact on children's literacy and numeracy with the transition from Pasifika contexts to school.
- Students report positive influences on their learning and engagement when educational settings acknowledge and support their Pacific language/s (Mila-Schaaf & Robinson, 2010; Starks, 2005; Wilson, 2010).
- Despite the availability of selected outcome measures in different areas (eg, NEMP, PISA, asTTle, PAT tests), there continues to be insufficient evidence of outcomes on student achievement across the curriculum (ERO, 2012). The NCEA in senior secondary school provides capacity to evaluate approaches using valid and reliable measures across schools, but there has to date been limited use of NCEA data in the area of literacy and numeracy specifically.
- There is evidence that students, including Pasifika students, have higher than expected progress across years 0–8 as part of the Secondary Numeracy Project (SNP), but in the absence of a quasi-experimental research design involving a comparison group, gains cannot be directly attributed to the SNP (Young-Loveridge, 2006).
- Investigations of and sources for out-of-school literacy supports the importance of home–educational connections for literacy development at early childhood and primary level, but there has been insufficient research at secondary level on this issue (Dickie, 2008, 2011; Saminathan, 2006; Wolfgramm-Foliaki, 2006).
- There is growing evidence of the importance of teacher skills and understandings in culturally responsive pedagogies for enhancing educational outcomes for Pasifika learners (Fletcher, Parkhill, Fa'afoi, & Taleni, 2006; Fletcher, Parkhill, Fa'afoi, Taleni, & O'Regan, 2009; Maher, 2009; Marat, 2005). While Sleeter's (2011) collection is focused on evidence of the impact of culturally responsive pedagogies for Māori student achievement, the reported series of studies provides an exemplar for investigating empirically the impact of teacher use of such pedagogies, including association with student outcomes.
- Longitudinal research on NCEA achievement in relationship to Pasifika student motivation orientations supports the need to address underlying attitudes towards learning and the feasibility of intervening with motivation orientations to enhance secondary outcomes (Graham, Meyer, McKenzie, McClure, & Weir, 2010; Hodis, Meyer, McClure, Weir, & Walkey, 2011; McClure, et al., 2011; Meyer, Weir, McClure, Walkey, & McKenzie, 2009). For example, Pasifika students report higher levels of the (negative) motivation orientation 'Doing Just Enough' than either New Zealand European or Asian students: this motivation orientation is highly predictive of lower achievement on the NCEA 1–3 years later, so is a crucial focus for intervention (Hodis et al., 2011).
- Pasifika students are disproportionately represented in smaller, low-decile secondary schools, where there are fewer subject choices, and in low achievement streamed groups in secondary school where they may also be disproportionately advised to aim for unit standard coursework rather than achievement standards. This differential means that inequitable opportunities accumulate across the school years for Pasifika students. Research focused on the transition from secondary to tertiary highlights the role played by the availability of NCEA achievement standards and subject choices for secondary students, revealing inequities across schools that have detrimental long term implications for Pasifika students (Turner, Irving, Li, & Yuan, 2010).

Based on these findings, we recommend the priorities given below for research in the area of academic achievement, literacy and numeracy.

Priority #5: In respect of children who enter educational settings (ECE to secondary) speaking a Pacific language rather than English as their first language: conduct a synthesis of the evidence available on the impact of various programme initiatives on their educational outcomes.

5.1 Comparison studies of the effects of different types of immersion, bilingual, and English language programmes on educational outcomes across one to three years.

Priority #6: Systematic evaluation of approaches for ongoing planning and problem-solving to enhance student achievement based on analysis of longitudinal data for individual students.

6.1 Research at the intermediate and secondary education levels on teacher team planning across the curriculum to enhance literacy within the context of different subjects and courses.

6.2 Research at intermediate and secondary levels on teacher team planning across the curriculum to enhance numeracy within the context of different subjects and courses.

Priority #7: Longitudinal research on effective interventions to enhance motivation and achievement.

7.1 Effectiveness of various approaches to in-school homework programmes (eg, motivation-enhanced versus traditional study-skills orientation).

7.2 Impact of involving parents and students in aspirational planning to set achievement targets annually and across school years.

Priority #8: Research on the most important educational outcomes for early childhood education participation relating to successful transitions to primary school.

8.1 Models for parent involvement in transition planning (especially in relation to their children's learning and achievement).

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature, 2002–2012[6]

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Amituanai-Toloa (2005)	• Reading comprehension in English • Oral language and reading in Samoan	• Primary	• Samoan	This study examined the effectiveness of a reading comprehension programme in six Samoan bilingual classrooms in two South Auckland schools across three school years. The researcher carried out systematic classroom observations, administered measures of reading comprehension in English and reading comprehension and oral language in Samoan. Results suggested a transitional effect at the level of word knowledge, with students in the bilingual programme 'catching up' by year 6 to their mainstream peers. Findings suggest that more research is needed investigating effective teaching strategies for Pasifika students to comprehend English texts.					Quantitative (PhD thesis)
Amituanai-Toloa (2010)	• Language preservation	• Primary	• Samoan • Pasifika	Discussion of declining use of the different languages of Pasifika people in New Zealand, with particular reference to the Manukau, South Auckland region, and the implications of this decline for cultural identity and possible impact on academic success.	Essay on challenges with selected citations				
Amituanai-Toloa & McNaughton (2008)	• Reading comprehension • Bilingualism	• Primary • Intermediate	• Samoan	Investigation of cross-sectional samples of Samoan students years 4 to 8 across seven schools comparing reading performance in mainstream vs. bilingual programmes. Samoan students in bilingual settings scored lower on reading measures in years 4–5 but were nearly equal to mainstream Samoan students by year 8.					Quantitative

[6] For an explanation of how the contents of this table have been set out, please refer to pp. 7–8.

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Aukuso (2005)	• Literacy and reading proficiency • Bilingualism	• Primary	• Samoan	Reading proficiency was compared for Samoan bilingual children enrolled in the O le Taiala Samoan Bilingual Unit at a Manurewa primary school and Samoan mainstream counterparts. Findings indicate parallel growth in both Samoan and English for the students in the bilingual unit with similar outcomes for the two groups by year 7.					Quantitative
Benham (2006)	• Reading, mathematics, literacy • Motivation	• School-age • Tertiary • Transitions	• Hawaiian • Pasifika	Review of current literature on teaching and learning approaches to enhance educational outcomes for Pasifika students.		Narrative literature review			
Beaumont & Erlam (2010)	• Word skill achievement in a foreign language	• Intermediate	• Pasifika	Intervention study of mastery of word skills and reading comprehension in Greek and Latin by Pasifika students.					Quantitative
Burgess (2004)	• Literacy and reading materials	• Early childhood	• Samoan	This study investigated the availability of print materials in three a`oga amata (Samoan language early childhood centres) and three kindergartens in the Wellington region, revealing insufficient print materials that enable children to experience the stories and symbols of their Samoan culture.					Qualitative (MEd thesis)
Burnett (2009)	• Literacy • Language teaching	• Primary • Secondary	• Pasifika	Review of post-colonial educational policy and practices for Pacific peoples, towards Pacific culturalist alternatives for teaching of language and literacy.		Narrative literature review			
Davidson-Toumu'a (2005)	• Literacy • ESL academic reading	• Tertiary	• Pasifika	Three students of Pasifika descent participated in a study of their academic reading habits, skills and strategies in the context of available literacy support. Their ability to 'read to summarise' was affected by participants' cultural, linguistic and literacy backgrounds.					Qualitative (MA thesis)

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Dickie (2008)	• Literacy	• Primary	• Samoan • Pasifika	Socio-cultural analysis of student perspectives about literacy in and out of school through photo journals and interviews.					Qualitative (PhD thesis)
Dickie (2011)	• Literacy	• Primary	• Samoan	Study of Samoan children's out-of-school literacies at personal, interpersonal and community levels based on data gathered through photographs, journals, and interviews with 14 Samoan children and three adult church representatives. The findings highlight the importance of teacher knowledge of out-of-school literacy practices to negotiate for consonant and conflicting values across the various sites for literacy (at school, at home, and in the community).					Qualitative
Education Review Office (2012)	• Assessment • Student achievement	• Primary • Intermediate • Secondary	• Pasifika	This report includes analysis of school initiatives around assessment and learning for Pasifika achievement. Fifty per cent of the primary schools in this review round had collated information on Pasifika achievement in maths and reading compared with 8% in other curriculum areas. Only one quarter of secondary schools reviewed analysed maths and reading achievement, less than 20% did so in writing, and only 6 of the 52 schools had evidence from other curriculum areas. Only a small minority of schools had specific initiatives to support Pasifika student engagement, typically reporting only that Pasifika students were included in specific literacy and numeracy projects. Use of Pasifika contexts, themes and language was largely absent across schools.					Qualitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Esera (2002)	• Literacy • English proficiency	• Primary	• Samoan	This study of the impact of code-switching on literacy for year 6 Samoan students in two low decile primary schools reported enhanced understanding of ideas in English when student–student and teacher–student interactions to explore meanings took place in Samoan.					Qualitative (MEd thesis)
Fanene (2006)	• Writing	• Tertiary	• Samoan	A written questionnaire, interviews, and actual essay assignments from 14 university students were analysed for perceived and actual academic writing skills and learning strategies. Bernstein's critical theories provided a framework to analyse how existing communicative and teaching practices in mainstream education disadvantages minority students from working class communities.					Qualitative and Quantitative (MA thesis)
Fletcher (2009)	• Literacy for second chance adult learners	• Tertiary	• Pasifika	Interviews with a Pasifika woman described as a 'second-chance' adult learner identified barriers and cultural practices perceived to be in conflict with cultural expectations. The author considers that tertiary staff resistance to programme change towards introducing culturally responsive strategies could be the result of racism and/or misguided beliefs about acting ethically by engaging in uniformity rather than universality.					Qualitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Fletcher et al. (2006)	• Literacy	• Intermediate	• Pasifika	A study exploring perceptions of year 7 and year 9 Pasifika students experiencing difficulties in reading and writing. The summary of open-ended discussions with 34 students from four schools supported other evidence that challenges such as disruptive classroom behaviour, lack of culturally responsive resources and learning contexts, and minimal father input into literacy learning are adverse influences on student achievement and self-esteem.					Qualitative
Fletcher et al. (2009)	• Literacy	• Primary • Intermediate • Secondary	• Pasifika	Based on input from years 5–9 Pasifika students attending mainstream schools in the South Island regarding supports and barriers to their literacy learning, teachers and parents participated in focus group interviews regarding their perceptions of factors influencing achievement in literacy and learning. Participants emphasised the need for incorporating Pasifika values, language identities and cultural knowledge in teaching and learning practices.					Qualitative
Fletcher, Parkhill, & Harris (2011)	• Positive student–teacher relationships	• Intermediate • Secondary	• Pasifika	This paper describes strategies that can enhance student–teacher and student–student relationships in schools to promote literacy and numeracy in particular. Evidence from the literature is augmented by quotes from the authors' own research to illustrate points made. Teachers need to demonstrate empathy with the student's culture.	Discussion paper with selected references				Qualitative
Glasgow (2010)	• Language preservation • Literacy	• ECE	• Cook Islands Māori	Discussion of practices and initiatives implemented in Cook Islands early childhood education to enhance Māori language and culture and to strengthen use of authentic and traditional practices.	Essay with selected references and examples				

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Glasgow et al. (2011)	• Language preservation	• ECE (2–5 years)	• Solomon Islands	Discussion of the role of community and community involvement in early childhood education in the Solomon Islands curriculum, including preserving and enhancing the use of both Solomon Islands Pijin and the many vernacular languages and dialects spoken by the children and their families.	Policy discussion with selected curriculum examples				
Graham et al. (2010)	• Achievement motivations	• Secondary	• Pasifika	Pacific parents and students participated in focus group interviews conducted using culturally appropriate approaches at two urban secondary schools with a high percentage of Māori and Pacific students. Results highlight the importance of peer, family and teacher influences on achievement for Pacific as well as positive features of the NCEA that could be better utilised as the focus of interventions to enhance student achievement.					Qualitative
Greaney & Arrow (2012)	• Reading • Phonological skills	• Primary	• Pasifika	Outcomes of an intervention on assessment and teaching of phonological-based skills and strategies were compared for experimental and control groups of year 1 students, showing the positive impact of explicit phonological-based teaching on phonemic awareness, and significantly higher word recognition performance.					Quantitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Harker (2006)	• Academic achievement	• Secondary	• Pasifika	Study of ethnicity and school achievement to supplement the Ministry of Education's *Best Evidence Synthesis* by Biddulph et al. (2003), reporting results for large cohorts, including Pasifika students. Analysis indicates that controlling for socio-economic status and prior attainment reduces but does not eliminate risk for underachievement; overall, there is support for Biddulph et al.'s conclusion that family resources play a significant role in children's achievement.					Quantitative
Hodis et al. (2011)	• Academic achievement • Motivation orientations	• Secondary	• Pasifika	Longitudinal research on the relationship between NCEA achievement and student self-reported motivation orientations, including aspirations regarding qualifications upon leaving school. Findings reveal that boys in middle decile schools are more at risk than those in low or high decile schools or other students, including Pasifika. The relationship of motivation orientations to achievement outcomes after three years for Pasifika follow patterns identified previously by this research group, including the intervention implications of high 'Doing Just Enough' and low 'Doing My Best' orientations.					Quantitative
Hunter (2009)	• Mathematics	• Intermediate	• Pasifika	Reports results from a year-long partnership in urban primary schools to scaffold student use of proficient mathematical practices within 'reasoned inquiry and argumentation'. Observational analyses document use of intervention approaches to enhance reasoned mathematical inquiry by students.					Qualitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Kolone-Collins (2010)	• Literacy	• Birth to 5 years	• Samoan	Fagogo (Samoan stories of the night) are examined as a source of pedagogy to promote deep and critical understandings of their Samoan language. Author argues that fa'afailelega can be used as a framework for positive pedagogical ideas drawn from the fagogo, whereas educating Samoan children without analysis of Samoan wisdom deadens their souls and dims their minds in weakening and devaluing the fa'avae of fa'asamoa.					Qualitative (MEd thesis)
M. Latu (2004)	• Mathematics	• Tertiary	• Pasifika	This research investigated Pacific Island students' attributions for mathematics achievement and how they influenced their behaviour and motivation to learn mathematics during a Tuakana summer first year course in mathematics. Twenty-four students were interviewed about what they enjoyed most in the programme that included working in cooperative groups, and were also asked about supports they valued most in the mathematics department. The researchers conclude that educators needed to focus more strongly on facilitating student interest in maths and align student support networks more closely with the students' cultural backgrounds.					Qualitative
S. M. Latu (2006)	• Literacy • Bilingualism	• Primary	• Tongan	This case study utilised talanoa to investigate a guided reading programme in a Tongan bilingual unit classroom, revealing a hybrid pedagogy that bridges "the socialisation gap between the Tongan way of life (Mo'ui FakaTonga) and classroom (fakapalangi) environment".					Qualitative (MEd Thesis)

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
V. F. Latu (2005)	• Mathematics	• Secondary	• Tongan • Samoan	Information regarding language issues for Pasifika students learning mathematics was gathered from four Pasifika teachers, and 16 students and their families, in a secondary school in the Manukau region that has the highest percentage of Pasifika peoples in New Zealand. The information was obtained by means of questionnaires, interviews and observations of two classes. Results indicated a range of interwoven language and linguistic difficulties affecting learning. Word problems challenged the Pasifika students' English comprehension skills. The researcher concludes that students who use their Pacific first language while learning in English outperform those who do not and calls for further investigation of learning by bilingual students.					Quantitative and Qualitative
Lipine (2010)	• Academic achievement	• Secondary	• Samoan	A phenomenological approach with interviews identified 49 factors significant to respondents' successful achievement. These factors were further analysed to reveal three major themes: passion to achieve, capacity to deal with inconsistency, and holistic orientation to fa'asamoa as perceived by the students' aiga. Students emphasised influences of culture, church, community and change.					Qualitative (PhD thesis)
Maher (2009)	• Mathematics	• Early Primary	• Pasifika	Examples from one school showing how children in the early stages of acquiring mathematical concepts in years 1–2 can benefit from use of culturally relevant materials and activities.			Description of lesson exemplars		

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Mara & Burgess (2007)	• Literacy learning in a'oga amata	• Birth to 5 years	• Samoan	Description of a year-long action research project aimed at encouraging and strengthening children's Samoan language and literacy learning within an a'oga amata.			Description of project activities		
Marat (2005)	• Mathematics self-efficacy	• Secondary	• Pasifika	Research on the mathematics self-efficacy and achievement of students attending diverse Auckland schools, though results for Pasifika students are not disaggregated in the report. The researcher advocates enhancing achievement through use of culturally appropriate strategies and enhancement of self-efficacy.					Quantitative
McCaffery & McFall-McCaffery (2010)	• Language preservation	• ECE • Primary • Secondary	• Pasifika	Description of bilingual and immersion strategies for first language and second language medium education. Authors argue that knowledge of one's own Pacific cultural capital including language is essential for Pasifika academic success.			Narrative description of two school programmes		

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
McClure et al. (2011)	• Academic achievement • Achievement attributions	• Secondary	• Pasifika	Research on student attributions for their best and worst marks in senior secondary school on the NCEA and their relationship to achievement outcomes. Results showed that Pasifika girls were more likely than Pasifika boys to attribute their worst marks to lack of effort and to attribute their best marks to the teacher. Reporting 'Doing My Best' was a significant predictor of higher NCEA marks for other students but not for Pasifika. In contrast to attributions of European students, Pasifika students rated family as the second highest cause of success, more important than ability. The authors argue that value placed on social attributions and family influences and student attitudes regarding effort and 'Doing My Best' are important considerations for interventions to promote Pasifika student achievement.					Quantitative
McNaughton & Lai (2009)	• Academic achievement • Reading & writing	• Primary • Intermediate • Secondary	• Pasifika	Description and systematic replication evaluation of a school change model across New Zealand schools to enhance reading and writing, demonstrating accelerated achievement for Pasifika and Māori students, particularly across years 4–9. Emphasises the need for context-specific analysis at school and classroom levels addressing past histories of schooling as well as contemporary profiles.					Formal evaluation of school change model with outcome measures

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Meyer et al. (2009)	• Academic achievement • Achievement motivation	• Secondary	• Pasifika	Research reporting the initial findings from national longitudinal research on the relationship between the NCEA and student motivation and achievement. For factors related to achievement results, Pasifika students scored highest on 'Doing Just Enough' and among the lowest on 'Doing My Best', were more influenced by the 'Utility/Importance' but not 'Interest' of subjects, and had higher scores on 'Work Avoidance'. The authors highlight the intervention implications of the strong relationships between these motivation orientations and NCEA achievement results.					Quantitative
Mila-Schaaf & Robinson (2010)	• Language preservation • Academic achievement	• Secondary	• Pasifika • Tongan	Analysis of the Youth 2000 Pacific findings to identify characteristics of Pacific participants, with a focus on identifying variables associated with middle to high levels of academic achievement and positive educational outcomes. Students who spoke their Pacific language were more likely to report usually trying hard at school than those who did not, and cultural pride was associated with reporting doing well at school. Talanoa interviews with high achieving students revealed the importance of family influences and the 'migrant dream' held by their parents.					Qualitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Otunuku & Brown (2007)	• Self-efficacy and academic achievement	• Secondary	• Tongan • Pasifika	This large scale study examined student self-efficacy attitudes towards mathematics, writing and reading. Findings were that Tongan students were much more positive about writing than their peers in other Pacific groups and moderately less positive about their ability in reading compared to non-Pasifika students. Attitudes towards mathematics were similar across ethnic groups, and no attitudes towards subjects were predictive of achievement in those subjects for students who were predominantly lower achieving. The authors suggest that Tongan and other Pacific students may hold high self-efficacy and liking of their subjects because they receive high levels of praise from their teachers or because tasks are easy, but no evidence is presented for these hypotheses.					Quantitative
Pang, Han, & Pang (2011)	• Reading • Mathematics	• Intermediate	• Pasifika (USA-based)	Comparative analysis of large samples of Pacific students in California from 2003 to 2008 to investigate reading and maths achievement, highlighting cultural contexts of reading passages in English as culturally unfamiliar experiences that disadvantage Pacific Islands students. The authors also highlight need for research on maths skills—computation, algebraic reasoning, geometry, and problem-solving—towards reducing inequities in achievement outcomes.				Statistical comparisons for sample populations	
Pang, Kiang, & Pak (2004)	• Language preservation • Bilingualism	• Primary • Secondary • Transition	• Pasifika	Description of educational outcome statistics in the USA for Asian American and Pacific students, emphasising the importance of cultural competence and preservation of linguistic and cultural identity for students.		Narrative review		Statistical summaries of educational outcomes	

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Parkhill, Fletcher, & Fa'afoi (2005)	• Literacy	• Intermediate	• Samoan • Pasifika	Open-ended discussions with 23 Pasifika children, predominantly Samoan, enrolled in years 5–8, affirmed that support from their families, pride in their Pacific culture, and collaborative learning in the classroom were important to literacy skill development in reading and writing.					Qualitative
Passi (2011)	• High achievement	• Secondary	• Samoan	This thesis focused on a group of year 13 Samoan students in South Auckland identified as high achievers by their low decile secondary school. Students reported perceptions of factors important for success as self-belief and self-efficacy about their ability to excel; parental support; positive relationships; and other factors including identity and reciprocity. In student individual case studies, student resilience as well as culture and spiritual faith underpinned their commitment to succeed.					Qualitative (MEd thesis)
Pickford (2005)	• Linguistic and cultural continuity	• Primary (ages 5–6)	• Papua New Guinea	Provides a discussion of the importance of linguistic and cultural continuity in vernacular education in Papua New Guinea, with an emphasis on use of vernacular genres and storytelling to prompt indigenous, culturally continuous pedagogies.			Essay with detailed example of transcription of a Huli *stori*		

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Porirua City Council (2012)	• Academic achievement • Behaviour	• Early Childhood • Primary • Secondary • Transitions	• Pasifika	Report of NCEA achievement and disparities amongst Māori and Pasifika students at Porirua City schools where Pasifika students comprise a high percentage of the student population. The report concludes that overall, the educational system is underperforming nationally for Pasifika as is evidenced by pass rates at NCEA Level 2. The report highlights evidence that cultural and language-based alternatives (eg, language nests) to mainstream educational settings are making a positive difference for Pasifika students.				Descriptive statistics for the Porirua region compared with national figures	
Saminathan (2006)	• Reading	• Primary • Intermediate	• Samoan	Ten Samoan families participated in this study of recreational reading and homework support systems available to their children, ages 10–11. Results on a test of reading achievement correlated with the amount of and encouragement for recreational reading in the home. Culture and religion were important for high levels of reading at home.					Quantitative (MEd thesis)
Sharma (2006)	• Statistics and probability achievement	• Secondary	• Fijian-Indian	Individual interviews were conducted with 29 students aged 14–16 years enrolled in a high school in Auckland with a high proportion of Fijian-Indian students. Students were asked open-ended questions to investigate their understanding of statistical and probability concepts. Findings indicated that certain student beliefs and strategies based on prior knowledge could inhibit their mastery of probability ideas. The paper reports strategies to address Indian cultural influences in the teaching of mathematics to support statistical thinking.					Qualitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Sharma et al. (2011)	• Mathematics	• Intermediate	• Pasifika	Study of Pasifika student perspectives on mathematics learning and importance of communicating mathematical reasoning and strategies to peers and teachers. Findings support use of discursive approaches to mathematical thinking and reasoning.					Qualitative
Skerrett & Gunn (2011)	• Bilingualism • Biliteracy	• ECE	• Pasifika	This literature review addresses several research questions to identify: what counts as quality immersion early childhood education for Pasifika and Māori children; elements of quality that can inform early school success; and strategies used by quality ECE immersion programmes to generate strong language foundations and biliteracy.		Narrative literature review			
Spence (2007)	• Bilingualism	• Intermediate • Secondary	• Pasifika	This literature review includes analysis of the evidence of different approaches to bilingualism on the cognitive and linguistic achievements of Pasifika children, concluding that *additive bilingualism* that supports learning an additional language (eg, English) without detracting from the child's first language (eg, a Pasifika language) has more empirical support than *subtractive bilingualism*. There is insufficient evidence for conclusions to be drawn regarding immersion education for Pasifika.		Narrative literature review			

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Starks (2005)	• Language proficiency and preservation • Bilingualism	• Early childhood	• Samoan • Tongan • Cook Islands Māori • Niuean	This investigation of the language use of 120 individuals from four Pasifika communities in South Auckland revealed differing degrees of self-confidence in bilingual abilities, with varying effects on reported and observed patterns of language use. Findings suggest that educational settings should promote bilingual self-confidence and support community-friendly approaches to preserve Pacific and bilingual language abilities in the home and school communities.	Essay				Quantitative
Starks & Reffell (2006)	• Language preservation	• Primary • Intermediate	• Pasifika (Cook Islands Māori, Niuean, Tongan, Samoan)	A linguistic study of language preservation and linguistic changes to Pacific languages, using reading passages as the method of analysis.				Description of linguistic patterns	
Stewart-Brown (2011)	• Reading comprehension • Cross-age tutoring	• Secondary	• Pasifika	An investigation of reading outcomes as a function of cross-age tutoring—22 year 12–13 tutors with 44 year 9–10 students—over two school terms. Students were randomly assigned into either an experimental group to be given reading instruction, or to a control group given maths worksheets. The reading tuition, incorporating decoding skills instruction, reading of text and comprehension activities, resulted in the participating year 9–10 Pasifika students achieving significantly better word reading than control group students on the Burt Word Reading Test, but not on pseudo-word reading, WRAT word reading, or reading comprehension.					Quantitative (MLitEd thesis)

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Tagoilelagi-Leota et al. (2005)	• Biliteracy and bilingualism	• 4–6 years	• Samoan • Tongan	Investigation of transition to mainstream schools for Samoan and Tongan families and their children who had attended Pasifika early childhood full immersion programmes using their first language. Thus, children entered school as incipient bilinguals with some parallel biliteracy skills. Literacy in each of Samoan and Tongan languages weakened over the first year of school in favour of English. Where there was a focus on rapid shift from a Pacific language to English, the result was that children were now 'at-risk bilinguals'.					Quantitative
Taleni et al. (2007)	• Reading	• Primary • Intermediate • Secondary	• Samoan	Students were interviewed to identify what they regarded as supports that helped them to become readers/writers. Among the challenges and difficulties described by students were comprehension of text (particularly vocabulary understanding), enjoyment of and exposure to reading, difficulty level of reading texts, use of the library, home and school influences, availability of culturally appropriate resources, and teaching practices such as reading aloud in class.					Qualitative
Toloa, McNaughton & Lai (2009)	• Reading comprehension	• Intermediate	• Samoan	Results of intervention research to raise English achievement and explore relationship between levels of literacy and language in Samoan versus targeted changes in English. Children instructed in bilingual programmes achieved substantial increases in performance compared with those in English-medium programmes. The study supports transfer of learning from the first language to enhanced mastery of English as a second language in reading comprehension.					Quantitative

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Tuafuti, Pua, & van Schaijik (2011)	• Literacy • Reading	• Primary	• Pasifika	An examination and critique of policy in the area of raising Pasifika children's achievement and literacy levels via the adoption of National Standards and related English-medium assessment tools.	Essay critique with selected references				
Turner et al. (2010)	• NCEA achievement	• Secondary	• Pasifika	Research from the Starpath Project highlights relationships between the availability of NCEA achievement standards and achievement outcomes for students, including inequities in opportunities for students across the sector. Increased availability of standards has a positive relationship for higher achieving and a negative relationship for lower achieving Pasifika students. The authors advocate closer study of schools which have a higher than expected success rate, especially for their Māori and Pasifika students, to identify strategies and learn from their successes.					Quantitative
Wilson (2010)	• Language preservation • Home–school	• Primary • Secondary	• Samoan	Study of Samoan language maintenance in New Zealand as perceived by students, teachers and parents. Researcher advocates for the need to preserve Samoan language as integral to cultural identity.					Qualitative (MA thesis)
Wolfgramm-Foliaki (2006)	• Literacy	• Early childhood	• Tongan	This study examined the literacy activities of six children and their families across their language nest, home, and church Sunday school, highlighting the role of multiple sites for supporting literacy development. Findings showed that family practices were underpinned by Tongan culture, and that church was seen by families as critical to children's literacy experiences and language preservation.					Qualitative (PhD thesis)

Table 3: Academic achievement, including literacy and numeracy, in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Young-Loveridge (2006)	• Mathematics • Numeracy	• Primary • Intermediate	• Pasifika	Analysis of patterns of progress for approximately 30,000 Year 0 to 8 Pasifika students participating in the Numeracy Development Project (NDP) from 2002 to 2005, revealing that those who participated in the NDP 'improved substantially' in mathematics performance on the IEA Third International Mathematics and Science Study (TIMSS). Teacher use of student interviews to identify strengths and weaknesses for individual students was also found to be helpful for supporting mathematical learners.				Descriptive comparisons across ethnicities	Quantitative

3.4: Effective teaching

Table 4 provides an overview of reviewed research focused on issues relevant to effective teaching across the sectors. There has been significant research on this topic since the Coxon et al. review, with over 50 publications since 2002 covered in our review.

Nevertheless, work in this area has been overwhelmingly qualitative, with only two of the studies reviewed reporting quantitative analyses of outcomes associated with particular approaches to teaching. The majority of the data on effective teaching relates to attitudes and perceptions of adult learners (eg, teachers) following their participation in particular professional development of programmatic initiatives about Pasifika achievement without evidence of actual impact on the students or classroom practices as opposed to what adults experienced.

Key findings with regard to effective teaching are:

- There is research evidence of a growing consensus among educationalists that culturally responsive pedagogies, such as the use of languages and culturally appropriate learning and teaching, are important to support learning, including the achievement of Pasifika learners (Averill, 2011; Davidson-Touma'a & Dunbar, 2009; Kepa & Manu'atu, 2006a; M. Latu, 2009; Lee-Hang, 2011; Mara & Marsters, 2009; McCaffery & McFall-McCaffery, 2010; Schuster, 2008; Te Ava, Airini, & Rubie-Davies, 2011).
- There is a dearth of research focused on effective teaching for Pasifika students who are gifted and who have special education needs, including culturally responsive special education but also with respect to services generally (Meredith, 2009; Weir, 2003).
- There is a need for research that provides evidence of intervention programmes developed in schools that enhance secondary school achievement, monitoring achievement-related attitudinal aspects as well as achievement outcomes for Pasifika students (Sanders, 2011).
- There is a growing evidence base regarding effective culturally responsive teaching practices at tertiary level, indicating that teaching staff at tertiary who have an appreciation and understanding of cultural backgrounds can assist Pasifika students to develop through culturally inclusive learning. Although the majority of this work is qualitative rather than reporting achievement outcomes such as retention, academic grades, and graduate outcomes, it is important to note that there is a need for more research using both qualitative and quantitative approaches (Arini et al., 2009; Elliot, 2008; Kalavite, 2010; Kēpa, 2008; Ng Shiu, 2011; Penn, 2010; Rio & Stephenson, 2010; Ross, 2009; Wendt-Samu, 2006).
- For Pasifika students at all levels of the education system, research has indicated that regular contact by the educational institution with the home is associated with higher achievement for Pasifika students. The value of Pasifika parent voice has also been highlighted through ideas from parents/families that could assist teachers with effective teaching and learning pedagogies to support Pasifika students. However, although these and some similar research findings have been highlighted by researchers such as Evans (2011), Graham et al. (2010), Hedges and Lee (2010), M. Latu (2009), Ng Shiu (2011), and Siope (2010, 2011), there is still insufficient consideration given by teaching staff to linkages with the family, home, and community to promote achievement outcomes.

Based on these findings, we recommend the following priorities for research in the area of effective teaching.

Priority #9: Research on interventions to prepare educators for effective culturally responsive teaching.

9.1 Approaches associated with positive pedagogical changes and enhanced cultural self-efficacy for educational personnel.

9.2 Approaches associated with enhanced educational outcomes for Pasifika children.

Priority #10: Research on culturally appropriate home–educational partnership approaches to support effective pedagogies, evaluated for impact on early childhood and school settings, educators, families, and particularly the children.

10. 1 Research on effective approaches for teacher planning and problem-solving alongside parents and family to support and enhance children's learning.

10.2 The impact of teachers informing their practice by seeking parent and family aspirations for their child.

Priority #11: Research on effective teaching and educational support services for Pasifika learners who are gifted and who have special needs.

11.1 Research on culturally appropriate strategies and programmes to support and challenge Pasifika learners who are gifted and talented.

11.2 Research on culturally appropriate strategies and programmes to support and challenge Pasifika learners who have special needs.

Priority #12: Longitudinal evidence on educational outcome indicators and learners' pathways through ECE, school, and tertiary level study or training to inform educational planning, teacher practice, and evaluation of short- and long-term outcomes for learners.

12.1 Investigation of effective approaches for parent and family involvement in their children's learning at key transition points (home to ECE; ECE to primary; primary to intermediate; intermediate to secondary; secondary to tertiary).

12.2 Research to define and measure meaningful educational outcome indicators for Pasifika learners at different transition points across educational sectors, as perceived by students, family/parents, the Pasifika community, and educationalists from the sectors.

Priority #13: Formal evaluation of programme initiatives designed to facilitate transitions across sectors incorporating long-term educational outcomes as well as short-term impact on learners.

13.1 Formal evaluation of specified, intended educational outcomes for Pasifika learners as a function of participation in programme initiatives and projects.

Table 4: Effective teaching in the Pasifika education research literature, 2002–2012[7]

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Allen, Taleni, & Robertson (2009)	• Cultural responsiveness	• Primary • Intermediate	• Samoan	Five teachers from schools enrolling significant numbers of Pasifika students participated in a 2007 trip to Samoa that was associated with an impact on teachers' cultural self-efficacy and sense of agency for student outcomes. The authors challenge teachers to examine and transform their cultural assumptions and beliefs to promote learning for Pasifika students.					Qualitative
Arini et al. (2009)	• Teaching and learning in tertiary	• Tertiary	• Pasifika	This report is a summary analysis of detailed technical reports from the *Success for All* research team affiliated with the University of Auckland. It identifies best practice in non-lecture tertiary teaching, factors that help and hinder Pasifika student success, and promising programmes reflecting partnerships between educators in collaboration with Pasifika experts.		Critical Incidents Technique applied to interpretation of review across reports			
Averill (2009)	• Mathematics teaching practices	• Secondary	• Pasifika	Evidence from interviews and 100 lesson observations supports the influences of caring teacher–student relationships for academic achievement in mathematics. Teachers who are responsive to student learning needs including diverse cultural identities can enhance student motivation and mathematics achievements through their explicit adaptations for Pasifika students.					Qualitative (PhD thesis)

[7] For an explanation of how the contents of this table have been set out, please refer to pp. 7–8.

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Averill (2011)	• Effective teaching of mathematics	• Secondary	• Pasifika	Six teachers were interviewed and observed in 100 year 10 mathematics lessons across three mid to low decile schools. The purpose was to investigate teaching practices that contribute to strong teacher–student relationships within the classroom that support and foster strong levels of student motivation and achievement. Examples drawn from results for two teachers showing high levels of culturally responsive teaching provide evidence of the importance of caring teacher–student interactions for supporting student mathematics learning.					Qualitative
Davidson-Touma'a & Dunbar (2009)	• Learning advice and support	• Tertiary	• Pasifika	Tertiary teachers, learning advisors, and Pacific students were interviewed about how best to support Pacific students academically in tertiary studies. Findings revealed various basic limitations—lack of money, time, and physical space for study—but also aspects that can be accommodated, such as better understandings of Pacific concepts of time and why Pacific students are less likely to ask questions in class. Pacific students particularly valued staff who demonstrated and valued the characteristics they themselves value. It is noted that learning advisors in particular could play a mediating role with lecturers in supporting Pacific students in their studies.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Douglas (2003)	• Teacher attributes	• Secondary	• Pasifika	Pasifika students at a North Island secondary school were interviewed to investigate their perceptions of teacher factors that facilitate or hinder their achievement, including descriptions of teacher attributes that can help Pasifika students strive to achieve.					Qualitative (MEdAdmin thesis)
Elliot (2008)	• Engineering education	• Tertiary	• Pasifika	Examination of likely differences between Pacific cultures and western-style school cultures relevant for tertiary teachers. The focus of the paper is to assist teaching staff in tertiary institutions to appreciate and understand cultural backgrounds of marginalised Pasifika students and highlight how institutions can assist teaching staff to develop more culturally inclusive learning environments for students.	Discussion paper with selected examples				
Evans (2011)	• Pedagogy for boys	• Secondary	• Pasifika	A student questionnaire, student focus group interview, and interviews with three successful teachers of Pacific boys reveal practices perceived to lead to high achievement. These include creating a positive learning environment, setting high expectations, regular contact with home, and teaching with a positive attitude along with good relationships with students and recognition of cultural diversity.					Qualitative (MEd thesis)

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Fitzpatrick (2005)	• Hauora (physical education)	• Secondary	• Samoan • Niuean • Cook Islands Māori • Tahitian • Tongan • Māori	Seven year 12 physical education students were interviewed about their reactions to physical education courses, including individual and focus group interviews. Themes identified the importance of interactions with others, connections, and recognition. The author concludes that the teaching of physical education has not adequately recognised student agency in the curriculum and what students bring to their learning.					Qualitative
Fletcher et al. (2011)	• Positive student–teacher relationships	• Intermediate • Secondary	• Pasifika	This paper describes strategies that can enhance student–teacher and student–student relationships in schools to promote learning. Evidence from the literature is augmented by quotes from the authors' own research to illustrate points made. Teachers need to demonstrate empathy with the student's culture.	Discussion paper with selected references				Qualitative
Fuemana-Foa'i, Pohio, & Terreni (2008)	• Visual arts in ECE	• ECE	• Pasifika	Ideas are presented through scenarios to show how the visual arts can provide an important vehicle to assist children and their families to engage in early childhood curricula. Major emphasis is placed on how use of the visual arts within Te Whāriki (the curriculum framework for the ECE sector in Aotearoa New Zealand) can promote effective teaching and learning overall as a guide to practice, not a directive map.			Narratives with exemplars from different programmes		

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Haddock (2007)	• Professional development for teachers • ESOL strategies	• Secondary	• Pasifika	This article reports the results of analysing achievement progress for eight students across three year 9–10 classes, with a focus on identifying literacy strategies with or without empirical support but that teachers could use to support learning. A strategy checklist was used by teachers to develop students' vocabularies, and teachers reviewed their data in reflective discussions with specialist advisers. Teachers' comments revealed a developing awareness of how specific strategies to meet student needs can improve their practice.					Quantitative and Qualitative
Hedges & Lee (2010)	• Parent–teacher partnerships	• ECE	• Pasifika	Investigation of outcomes for student teachers from a community placement designed to enhance their preparation for working in partnership with families in early childhood education. Focus group interviews with 13 students revealed that the community placement experience shifted students' varied conceptions of relationships with families and views of the meaning of partnerships in positive ways.					Qualitative
Hipkins et al. (2005)	• NCEA assessment	• Secondary	• Pasifika	Based on NZCER's *Learning Curves* project, this report is focused on differences between schools in subject choice offerings in English, mathematics, science, technology and the arts as perceived by year 11–13 students, the principals, and teachers. Findings highlight the importance of understandings about the purposes of assessment and its relationship to learning.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Kalavite (2010)	• Academic achievement	• Tertiary	• Tongan	Investigation of factors perceived by 25 Tongan-born university and polytechnic students as key to their academic success. Participants advocated that tertiary institutions needed to reflect a deep understanding and respect for Tongan as well as New Zealand social and academic relationships, and called for more flexibility of ta (time) and va (space) to release social tensions and enhance achievement in learning environments.					Qualitative (PhD thesis)
Kēpa (2008)	• Learning in the university	• Tertiary	• Pasifika	This position paper argues that today's university in New Zealand must reflect indigenous ways of knowing. While it predominantly focuses on Māori issues, the author also notes similar issues with respect to Pasifika ways of knowing and acting. A case is made for the university to develop curricula that teaches students how to think and act as cultural intermediaries in an increasingly diverse world.	Essay with selected examples				
Kēpa & Manu'atu (2006a)	• Teacher education in early childhood	• ECE	• Pasifika	Description of the development of a new qualification in early childhood education for Pasifika. Key Pasifika concepts are used for: collaboration and consultation; educational participation as a responsibility to the community as well as to acquire power and wealth; respect for and use of the languages and cultures of Pacific peoples; and consensus making.	Essay with selected exemplars				

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
M. Latu (2009)	• Pedagogy for teaching and learning	• Primary	• Tongan	Interviews with Tongan migrant parents using talanoa (critical dialogue) reveal perspectives on effective teaching and learning pedagogies for working with Tongan children.					Qualitative (MEd thesis)
Latu & Young (2004)	• ICT teaching approaches	• Tertiary	• Pasifika	This discussion paper proposes that for students from Pacific Islands backgrounds to gain maximum benefit from classrooms utilising ICT, teachers must recognise cultural diversities and adjust their teaching modes accordingly. The focus of the paper is on strategies towards increasing participation, and on retaining and supporting Pacific Islands students to complete their tertiary qualifications in computing and ICT.	Discussion paper with selected examples				
Leaupepe (2009)	• Preservice teacher education	• ECE	• Pasifika	Discussion of the prominence and privileging of play in early childhood programmes and the tensions that Pasifika student teachers encounter between their cultural beliefs and the concepts and practices presented in ECE teacher education programmes in New Zealand.			Descriptions from current teacher education programmes		
Leaupepe (2011)	• Teacher knowledge	• ECE	• Cook Islands Māori	Discussion of contemporary and traditional understandings about the role of play in learning for young children, including teacher knowledge and views about the implications of play for their practice in early childhood education.			Incorporates several reflective narratives from ECE teachers		

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Lee-Hang (2011)	• Science teaching • Formative assessment	• Primary • Intermediate • Secondary	• Samoan	Investigation of Samoan teacher views of formative assessment and use of fa'asamoa cultural aspects in their practice. Culturally constructed le-tautala (pupil silence) in classrooms seemed to hinder teacher–student interactions about formative assessment so that the use of written worksheets was found to be more culturally appropriate to overcome le-tautala.					Qualitative (PhD thesis)
Lei (2006)	• Teacher education	• Primary • Intermediate • Secondary	• Pasifika	This theoretical position paper presents evidence from the literature including research to support the argument that all teachers must reflect critically on their positionality within a monoculturally white educational system. She argues there is a need for anti-oppressive pedagogical approaches for teaching and learning with Pacific Islands students, with a focus on challenging practices in the USA.	Discussion paper with selected references				

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Luafutu-Simpson et al. (2011)	• Teacher education	• ECE	• Samoan	This study used an action research approach with the aim to facilitate appropriate teacher education practice for students enrolled in ECE programmes. In addition, the purpose of the research was specifically designed for practitioners in ECE settings looking at assessment of young Samoan children's learning and development. Employing document analysis, interviews, focus groups, and case studies, researchers were able to highlight the rich way to assess Samoan children's learning using their own world-views rather than the Western style ones. Moreover, the authors emphasised the importance of tautua ('service and responsibility'), alofa ('love and commitment') and fa'aaloalo ('respect'), concepts that play a major role for Samoan people living in Aotearoa New Zealand.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Mara (2006)	• Tertiary teaching practices	• Tertiary	• Pasifika	Twenty Pacific women graduates were interviewed to gather information about their socialisation in family and church and their tertiary education experiences and responses to their education. Findings revealed that perceptions of low expectations for their performance by lecturers led to increased awareness of bias against cultural differences. The researcher recommends that tertiary institutions consult with Pacific students about educational supports where special provisions are planned to ensure that they are perceived and experienced by these students as intended—ie, to support successful outcomes of the students, rather than inadvertently adding to pressures on students to drop out.					Qualitative (PhD thesis)
Mara & Marsters (2009)	• Mentoring	• Tertiary	• Pasifika	This small scale study evaluated a mentoring programme at EIT (Eastern Institute of Technology) to identify success factors that are perceived as promoting Pasifika academic success by each of Pasifika students, their lecturers, and the Pasifika mentor. The researchers report that important factors included the quality and nature of the mentor's role, skills, personal qualities, and relationships with students and lecturers. Also identified was the need to include more culturally appropriate learning and teaching resources and tools for Pasifika students.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Marshall, Baldwin, & Peach (2008)	• Pasifika PTE practices	• Tertiary	• Pasifika	Interviews were conducted with tertiary educators at three Pasifika private training establishments (PTEs) identified as having positive tertiary education outcome data for Pasifika. The three PTEs were also reported to adhere to the surrogate aiga concept, the concept of belonging, and to the concept of inclusiveness and humanity, seen as essential to create a holistic Pasifika PTE environment.					Qualitative
McCaffery & McFall-McCaffery (2010)	• Bilingualism • Language preservation	• Early Childhood • Primary • Intermediate • Secondary	• Cook Islands Māori • Niuean • Tongan • Samoan	Discussion concerning the four major Pacific Islands language groups in New Zealand and the fact that the New Zealand educational system does not cater for children continuing to speak these languages, nor for those who wish to learn their heritage languages. The authors argue that the knowledge of one's own cultural capital, including language, is a significant factor for Pasifika academic success.	Theoretical discussion with selected examples				
McKegg (2005)	• Structured learning communities	• Tertiary • Transition	• Pasifika	Action research involving interviews with Pasifika students attending a bridging or foundation programme at Unitec to prepare them for degree study. The paper investigated participation in Pasifika learning communities as a strategy to enhance student networking, retention and success. Students emphasised the importance of their connection with their tutors ('steps down to our level'), group work, and bonds between students.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Meade, Puhipuhi, & Foster-Cohen (2003)	• Research priorities for Pasifika ECE	• ECE	• Samoan • Tongan • Cook Islands Māori • Niuean	Final report to the Ministry of Education reviewing immersion and bilingual early childhood education literature to identify priorities for Pasifika early childhood education research.		Narrative literature review			
Meredith (2009)	• Special education • Inclusive education	• Primary • Intermediate • Secondary	• Tokelauan • Samoan	Interviews carried out with 10 participants from Tokelau and Samoa revealed traditional, modern, and personal perspectives about educational services for children with disabilities. Disability is still understood within medical, religious, or deficit-model paradigms in some cultures, hence presenting an attitudinal barrier to inclusion. On the other hand, traditional Tokelauan beliefs about treating people equally and with fakaaloalo (respect), alofa (love), and poupouaki (support) align with an inclusive perspective.					Qualitative (MDevStds thesis)
Middleton (2008)	• Transition	• Secondary • Tertiary	• Pasifika	This paper discusses historical developments for mass secondary education that have resulted in an emphasis on preparation for academic tertiary study and less concern for or attention given to those who will move into work or vocational training after leaving school. Hence, there is a major problem in the sizeable minority of students, including Pasifika, currently disengaged from secondary education and likely to fail in higher education or training. New interventions designed to provide for broader pathways for students post-secondary are recommended.	Discussion paper with selected examples and statistics				

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Murray & Morgan (2009)	• Support services for engineering students	• Tertiary	• Pasifika	Description of an initiative to increase the proportion of Māori and Pasifika students in engineering school at the University of Auckland, including the formation of a central support group (SPIES) for these students. Students in the SPIES cohort were provided mentoring and tutorial services during their first year of study, leading to the creation of Pasifika Student Mentor positions as one of five parts to this initiative.			Programme description but no student outcome data included		
Nakhid (2003)	• Academic achievement	• Transition to tertiary	• Samoan • Tongan	Teachers and two groups of Samoan and Tongan students—one group starting and the other group finishing secondary school—who had attended New Zealand schools for the past six years were interviewed to obtain a retrospective appraisal of Pasifika students' school experiences. Schools were reported to be largely non-responsive to Pacific cultures and did not create a sense of belonging. The findings have implications for the redesign of teacher education and representation of Pacific cultures in schools.					Qualitative
Nakhid (2006)	• Tutorial support	• Tertiary	• Pasifika	Examination of tertiary academic staff opposition to extra tutorial support for Pasifika students purportedly because of ethical considerations.			Personal narrative of events at one TEI		

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Nakhid et al. (2007)	•	• Tertiary	• Tongan • Samoan • Fijian • Niuean	Five New Zealand-born Pasifika students were interviewed regarding their views on learning and teaching, whether their learning needs were being met, and, if not, what recommendations they had for providing enhanced learning support. Issues were raised about relationships between lecturers and Pasifika students that put them at a disadvantage, and a mechanism was examined whereby problems could be brought to the attention of a lecturer by someone other than Pasifika students themselves. A fono (meeting) was also held with lecturers and students to discuss concerns and solutions.					Qualitative
Nelisi (2004)	• Culturally responsive pedagogies	• Primary	• Niuean • Tongan • Samoan • Cook Islands Māori	Case study of a Pasifika teacher in a low decile primary school in South Auckland, including a week of classroom observations, interviews and discussions, depicting an art of teaching practice theorised as an example of Bourdieu's cultural capital framework. No student data are presented.					Qualitative (MEd thesis)

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Ng Shiu (2011)	• Health education	• Tertiary	• Samoan	Narrative data from individual and focus group interviews with University of Auckland Samoan students in health education and their parents, and data from diaries, were analysed to identify key factors that constrain and enable Samoan student learning. Families and students described how family support for academia is embedded within fa'asamoa, and students reported how their cultural identity impacts on their learning. The researcher summarises characteristics of learning environments seen as facilitative of meaningful engagement and participation for positive educational outcomes.					Qualitative (PhD thesis)
O'Regan (2006)	• Teacher education	• Tertiary	• Samoan	This study of a group of senior educators in Samoa pursuing a master's degree sought to investigate their educational journeys in a western institution as a Pasifika person. The research found that Pasifika students must 'live between two worlds' to succeed with their cultural identity intact, and advocates that tertiary education environments must instead take account of fa'asamoa experiential learning and preference for oral learning to better enable Samoan students to be successful.					Qualitative (MTchLn thesis)

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Otunuku (2010)	• Academic achievement	• Secondary	• Tongan	Evidence from a mixed methods study of Tongan secondary students' conceptions of schooling and achievement indicates continued deficit theorising by teachers that inhibits learning by students. The researcher also argues that schools must emphasise the competitive challenge of doing well in examinations to complement current emphasis on cultural responsiveness.					Quantitative and Qualitative (EdD thesis)
Pang (2009)	• Teacher education	• Primary • Intermediate	• Pasifika	This research investigated the beliefs of 19 Asian-American and Pacific Islands teachers in a low-income K–8 school in the USA. Teachers were found to have assumed agentic positions rather than viewing students from a deficit perspective, and they were making major commitments to enhance learning for their students and develop trusting relationships with parents.					Qualitative
Penn (2010)	• Academic achievement • Qualifications completion	• Tertiary	• Samoan	Six New Zealand-born Samoans were interviewed and the data were analysed thematically to investigate structures and processes perceived as important to support educational success and degree completion for Samoan tertiary students. Samoan structures, especially family, were found to be crucial because of the fa'asamoa processes they engender, and the sense of identity that is retained through life. The researcher concludes that tertiary staff must develop meaningful understandings of Pasifika concepts, and that these should also be reflected in tertiary education organisation policy and practice.					Qualitative (MEd thesis)

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Rio & Stephenson (2010)	• Effective teachers	• Tertiary • School	• Pasifika	This study with teacher education students at Manukau Institute of Technology—half of whom were Pasifika—focused on effective teaching of diverse students in urban schools. Interviews with Pasifika participants in the programme highlighted the importance of cultural and language connections with Pasifika students at school.					Qualitative
Ross (2009)	• Culturally relevant peer support	• Tertiary	• Pasifika	At the Open Polytechnic of New Zealand, Pasifika students, along with other students, were contacted and offered support through a programme guided by inclusive teaching practices and indigenous theory. Tutorial consultation and support helped students plan their studies and provided direct support when needed. Six suggestions for tertiary learning support are supported by results of the research. These were: academic counselling; study skills assistance; regular contact with student peers; peer mentoring and support services; advice and assistance; and teacher professional development.					Qualitative

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Sanders (2011)	• Study skills for enhanced motivation	• Secondary	• Pasifika	Several cohorts comprising predominantly Pasifika, but also Māori and Pākehā, students voluntarily participated in either a research-based, enhanced motivation study skills programme, or a traditional study skills programme as typically offered at New Zealand secondary schools. Students in each group were taught science material and attained NCEA credits as part of the programme. Motivation and other attitudinal surveys tended to favour the enhanced motivation group although both groups made academic progress and showed gains in positive attributions towards their study. Student interviews provided further information on student perspectives about their aspirations and achievement.					Qualitative and Quantitative
Schuster (2008)	• Effective teachers	• Primary • Intermediate • Secondary	• Pasifika	This essay explores the question 'Who are the best teachers of Pasifika children?' from a personal perspective. The author describes the Pasifika Cultural Responsiveness Programme (CRP)—in which Pasifika staff in special education offices connect cultural knowledge and theory with practice—as a successful national initiative. The author emphasises that ultimately it is ability to empathise that makes the best teacher, not ethnicity.	Personal essay with selected examples				

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Sharma et al. (2011)	• Numeracy and mathematics	• Intermediate	• Samoan • Cook Islands Māori • Tongan • Niuean	The views of Pasifika students about their mathematics learning are presented along with recommendations for more effective and appropriate practices that teachers can use to improve mathematics achievement. The researchers stress the importance of teachers helping students to engage with ideas about the role of communication in mathematics classrooms, rather than teaching the way they themselves were taught. Teachers also need to be alert to the possibility that a student is more fluent in his/her Pacific language than in English, and thus that students may have more mathematical understanding than they are able to express.					Qualitative
Siope (2010)	• NCEA achievement	• Secondary	• Pasifika	Pasifika students in two schools were interviewed to investigate their experiences with reference to the educational aspirations of the Migrant Dreamers arriving in New Zealand from across the Pacific since the 1950s. Pasifika students in both schools had concerns about their schooling experiences, but were aware of efforts by teachers on their behalf to address diverse linguistic and cultural backgrounds.					Qualitative (MEd thesis)

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Siope (2011)	• Academic achievement • Educational experiences	• Secondary	• Pasifika	This article reports findings from interviews with Pasifika students attending two schools participating in *Te Kotahitanga* research and professional development programme to investigate their experiences and perceptions of schooling. Students were concerned that they lived in 'siloed' worlds where school, family and church were kept separate and that despite their strong identities as Pacific people, they had learned not to draw attention to themselves at school. They affirmed teachers who were responsive, accessible, and motivating for their educational aspirations towards realising the 'migrant dream.'					Qualitative
Spence (2007)	• Effective teaching • Teacher professional learning • School improvement	• Intermediate • Secondary	• Pasifika	This interpretive synthesis of the literature reports evidence of effective teaching, teacher professional learning, school reform, and research on programmes specifically designed to enhance Pasifika achievement outcomes. The review incorporates information from the Ministry of Education's *Best Evidence Synthesis* on diversity along with a broad range of reports and literature to highlight four pathways to remedy disparities for Pasifika—national initiatives, Pasifika initiatives, key knowledge, key influencers.		Narrative literature review			

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Tagoilelagi-Leota (2010)	• Assessment in language nests	• ECE	• Samoan	Analysis of cultural appropriateness of current assessment tools used in early childhood settings with Pasifika children. Author describes use of fa'alelegapepe (celebration of help upon the completion of a woven mat) as a communal, collective approach to providing a stronger emphasis on Samoan traditions and cultural practices in assessment in Samoan language nests.	Essay with selected exemplars				
Te Ava et al. (2011)	• Culturally responsive pedagogy	• Secondary	• Cook Islands Māori	Exploration of the concept of culturally responsive pedagogy in secondary schools in the Cook Islands as a combination of culture, values, teaching and learning considerations. Proposes the metaphor of a Cook Islands tivaevae to conceptualise a culturally responsive pedagogy.	Essay with development of multiple metaphors from Cook Islands Māori language				
Vaioleti (2011)	• Culturally responsive pedagogy	• Tertiary	• Tongan	This personal exploration describes the author's 'integrated learning approach', Founga Ako, that can be used by teachers and adult students. The approach employs the Tongan educational concepts of 'ofa, 'ilo, poto, fatongia and fonua. The goal is to ensure that learnings for Tongan students are more holistic and aligned to their cultural ways and the aspirations of their communities.					Qualitative (PhD thesis)
Weir (2003)	• Gifted education	• Primary • Intermediate • Secondary	• Pasifika	This paper discusses the absence of gifted education programmes for Māori and Pasifika children in lower decile schools and communities. The author argues that it behoves New Zealand to develop appropriate identification and intervention tools to cater for this population in our schools.	Position paper with selected referencing				

Table 4: Effective teaching in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Wendt-Samu (2006)	• Responsiveness to student diversity	• Primary • Secondary	• Pasifika	This paper reviews approaches to teaching that are responsive to Pasifika student diversities. Possibilities for a Pasifika pedagogy in the context of New Zealand schools are raised that could serve as a framework of principles to guide teacher efforts to be culturally responsive to Pasifika learners. The author cautions that while research with Māori may be relevant to Pasifika, assumptions about applicability to Pasifika learners will require further study.	Position paper with selected references				

3.5: Transitions

Table 5 provides an overview of reviewed research focused on issues relevant to transitions across the sectors. We located only 12 publications which specifically address transition issues for Pasifika learners.

Significant findings to date include the following:

- Major research from The Starpath Project highlights a set of stepping stones and stumbling blocks that have been identified as having an impact on transition from secondary to tertiary study, including emphasis on systematic planning with future goals and high expectations. These stepping stones and stumbling blocks include: academic goals and realistic expectations for university study; family expectations; personal determination to succeed at university; early planning, including strategic subject choices; academic preparation and study skills; student leadership activities and work experience (Madjar, McKinley, Deynzer, & van der Merwe, 2010). In Millward, Stephenson, Rio, and Anderson (2011), students revealed that the location of the institution was a key factor in terms of convenience and familiarity of the surroundings, and also for opportunity to study alongside other Pasifika students.
- Promising strategies for smooth transitioning from early childhood settings to primary school provide additional support for features identified in other topical areas such as effective teaching, and family and community engagement (see Sections 3.4 and 3.2 above). These include the importance of mentoring, strong connections between educators and the home/community, valuing of Pacific languages and cultures, and systematic planning for transition across sectors (Chu, 2010; Podmore et al., 2004; Podmore et al., 2010). Tagoilelagi-Leota et al. (2005) found that for children who had attended full immersion early childhood programmes and were incipient bilinguals (with parallel incipient biliteracy), an imbalance between literacy skills in each of their two languages occurred soon after entry to school, with Pacific language skills weakening in favour of rapid progress in English. The children's subsequent patterns of progress suggested that by the end of their first year at school the children were now 'at-risk bilinguals'. This raises issues around how the transition process is managed for children entering school and the structures within the school to support and maintain a Pacific language.
- Research on the primary to secondary transition (Cox & Kennedy, 2008) and the transition from early childhood centres to school (Peters, 2010), while not specifically focussing on Pasifika students, nevertheless has some important implications for achieving good outcomes for Pasifika: the importance of learners being well-grounded in literacy requirements during their primary education before progressing to secondary; enabling students to see the point of school through learning that is relevant, engaging, and pitched at appropriate levels; ensuring positive relationships between students and teachers; involved parents and families; and teachers able to effectively teach deeper level skills. (See also McNaughton, 2011—findings from this research on the transition from primary to secondary school are discussed further in Section 4.3.)

Based on these findings, we recommend the following priorities for research in the area of transitions.

Priority #14: There is urgent need for more longitudinal data that will allow us to follow Pasifika learners' pathways through ECE, school, and tertiary level study or training, to assist in educational planning, and to enable problem-solving and evaluation of the short- and long-term outcomes for these students.

14.1 To be effective, teacher planning across school years needs to be based on longitudinal data showing individual student progress from year to year within the sector (eg, across the junior and secondary school years).

14.2 Collection of rigorous data and efficient data retrieval systems will enable educators and families to make well-informed judgements about effective interventions for learners.

Priority #15: There is urgent need for formal evaluation of programme initiatives intended to facilitate Pasifika students' transitions across sectors that incorporate long-term outcomes as well as short-term impact on students.

15.1 To fulfil the urgent need for evaluation of programme initiatives, future project initiatives will need to require from the outset that evidence of impact on student outcomes will be specified, collected, and evaluated.

15.2 There needs to be enhanced utilisation of independent and external evaluations following appropriate quasi-experimental designs whenever there is public funding for large-scale centre and school projects designed to improve student outcomes.

Table 5: Transitions in the Pasifika education research literature, 2002–2012[8]

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Chu (2010)	• Leadership	• Tertiary	• Pasifika	This paper is a personal perspective on Appreciative inquiry (AI) as an approach to leadership mentoring in higher education. The author emphasises the importance of mentoring relationships that build on the protégé's strengths towards enhancing leadership potential for Pasifika people.			Description of mentoring approaches		
Gae'e (2003)	• Transition to tertiary	• Tertiary and beyond	• Pasifika	This interview study employed semi-structured interviews with four Pasifika women professionals to investigate their success narratives and strategies viewed as important for their academic achievements during tertiary study and in their subsequent careers.					Qualitative (MEd thesis)
Gavet (2011)	• Transition • Retention	• Secondary	• Pasifika	This thesis examines a youth development programme designed to assist the development of Pasifika boys who belong to an elite sporting club at school so as to enhance their academic performance and prepare them with life-skills needed after leaving school.					Qualitative (MA thesis)

[8] For an explanation of how the contents of this table have been set out, please refer to pp. 7–8.

Table 5: Transitions in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Madjar et al. (2010)	• Transition	• Secondary to tertiary	• Pasifika	This report from the University of Auckland Starpath Project highlights challenges for students from low to mid-decile Auckland region secondary schools as they transition from school into university study. The study identifies 'stepping stones' or 'stumbling blocks' including: academic goals and realistic expectations for university study; family expectations; personal determination to succeed at university; early planning, including strategic subject choices; academic preparation and study skills; and student leadership activities and work experience. Key implications for students, families, schools and universities are discussed.					Quantitative and Qualitative
Millward et al. (2011)	• Tertiary teacher education	• Tertiary and beyond	• Pasifika	Description of a teacher education programme located on the Manukau Institute of Technology (MIT) campus, a joint initiative between the University of Auckland and MIT. The aim of the initiative was to increase recruitment of Māori and Pasifika teacher education students who would complete and qualify as teachers. Pasifika students evidenced a higher pass rate than those completing their programme on the university campus, and interviews with a large number of students revealed that the location was important for convenience, familiarity, and a sense of studying with 'people like them'.					Quantitative and Qualitative

Table 5: Transitions in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Nilan (2009)	• School to work transition	• Secondary • Tertiary	• Fijian	Quantitative and qualitative data were examined to identify factors associated with school to work transitions for Fijian students. Sources of data included structured interviews with principals and other personnel, plus a survey of students in their final two years of secondary school. Results showed that Fijian girls, including high-achieving students, were restricted by implicit and explicit promotion of traditional female career pathways. New initiatives are needed to raise career awareness among young people, adults and educational personnel to strengthen and improve young people's (in this case, Pasifika young people's) ability to have real choice from among contemporary workforce opportunities.					Quantitative and Qualitative
O'Regan (2006)	• Teacher education	• Tertiary	• Samoan	This study of a group of senior educators in Samoa pursuing a master's degree sought to investigate their educational journeys in a western institution as Pacific people. The research found that Pacific students must 'live between two worlds' to succeed with their cultural identity intact, and advocates that tertiary education environments must instead take account of fa'asamoa experiential learning and preference for oral learning to better enable Samoan students to be successful.					Qualitative (MTchLn thesis)

Table 5: Transitions in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Pasikale (2002)	• Tertiary	• Youth and adults	• Pasifika	Overview of initiatives in Pasifika education implemented in New Zealand with a focus on pathways from secondary to tertiary study and/or employment. Information is included regarding a skills enhancement programme, Tupulaga le Lumana'i, which the author considers successful due to the following features: scholarships for further study; cultural validation; Pasifika leadership and management; and skills instruction and qualifications enhancement. The author also describes several PTE pre-employment programmes in areas such as business, tourism, and real estate.	Essay with personal perspectives				
Podmore, Wendt-Samu & the A'oga Fa'asamoa (2004)	• Language preservation • Transitions from ECE to primary	• ECE	• Samoan	This is the final research report of a Centre of Innovation initiative focused on learning and language continuity as children make transitions within and from the A'oga Fa'asamoa supported by the programme. Key approaches identified to help learning and language continuity included culturally appropriate practices by teachers, along with an innovative transition practice of having a primary caregiver making transitions within the centre with 'her' group of children to maintain their feelings of belongingness.					Qualitative

Table 5: Transitions in the Pasifika education research literature—*continued*

Reference	Focus	Age range	Pasifika culture/s	Overview	Type of report and evidence				
					Discussion/ theory	Review	Descriptive/ experiential	Descriptive/ statistics	Research & evaluation
Podmore, Sauvao, & Mapa (2010)	• Transition from ECE to primary	• 5 year olds	• Cook Islands Māori • Niuean • Samoan • Tokelauan • Tongan	Socio-cultural investigation of transition from a Pasifika early childhood centre to primary school for 27 New Zealand Pasifika children and their families from five Pacific groups. Interviews with children, parents, early childhood teachers, and primary teachers, plus content analyses of 19 participating schools' charters revealed key focuses regarded as essential for positive transition. These included: valuing of Pacific languages and cultures at school; home–school partnerships; addressing implications of behavioural 'hidden curricula'; and aspects related to children's skills at entry to school and the impact of varying teacher and parental expectations.					Qualitative
Tagoilelagi-Leota et al. (2008)	• Bilingualism and biliteracy in transition from ECE to school	• 4–6 years	• Samoan • Tongan	Investigation of transition to mainstream schools for Samoan and Tongan families and their children who had attended full immersion ECE programmes, beginning school as incipient bilinguals with incipient parallel biliteracy. Literacy in each of Samoan and Tongan languages weakened over the first year of school in favour of English, suggesting rapid skills transfer effects from Pacific languages to English in mainstream schools.					Quantitative
Williams (2005)	• Mentoring • Transition from secondary to tertiary	• Secondary	• Pasifika	This review of international and national mentoring programmes addresses outcomes from mentoring schemes to remedy underachievement. The review identified multiple underlying causes for low achievement by Pasifika students, that mentoring in Pacific societies is based on transfer of knowledge, and that to be successful in educational institutions mentoring requires adaptation for Pasifika.		Selective literature review to develop 'four very central arguments' (MA thesis)			

Section 4: Comparing present findings with information gaps and research recommendations identified in the 2002 review of the literature

This section of the report addresses the extent to which the identified information gaps and research recommendations put forward in the earlier Coxon et al. (2002) review of the Pasifika education research literature have been addressed. As Coxon et al.'s review was organised by education sector, this section reports by sector as well, encompassing early childhood, primary, secondary and tertiary.

4.1: Pasifika early childhood education

Our review of the 2002 to 2012 literature reveals important ongoing gaps in information relevant to the early childhood sector since the Coxon et al. review. These include the following:

- **Government policy impacts**: There continues to be a need for comprehensive evaluative research on government policy initiatives to include, educate, and empower Pasifika parents. Although the proportion of Pasifika participating in quality early childhood education has increased over the last ten years, ECE participation rates for Pasifika continue to be significantly lower than for other ethnic groups. Thus robust research is needed to help address key questions on how to do better for Pasifika parents, families and communities.

- **Achievement outcomes**: Longitudinal research with a focus on Pasifika is still largely lacking and is needed to investigate relationships between the provision of early childhood experiences, including opportunities in different ethnic language groups, and achievement outcomes for these children. Well-planned and executed longitudinal research would allow valuable, much needed opportunities to investigate, for example, relationships between the nature and extent of Pasifika children's early childhood experiences, including within bilingual early childhood centres or those with a primary focus on first languages other than English, and educational outcomes for those children at different stages of their subsequent education.

- **Measurement of quality**: Research is needed to develop culturally sensitive measures of 'quality' that can assist in informing policy development and implementation in the provision of Pasifika early childhood education. The question of 'quality' is significant, with different Pacific groups having their own criteria for what they regard as 'quality'. Exploring this further is likely to be an important focus going forward.

- **Language and culture**: Research, as opposed to position and discussion pieces, that investigates the transition to school for Pasifika children and families and how to diminish dislocation and loss of language and culture, continues to be limited.

Each of these issues has received some attention in the literature published between 2002 and 2012 (see Table 3: Burgess, 2004; Mara & Burgess, 2007; Starks, 2005; Skerrett & Gunn, 2011; and Table 4: Tagoilelagi-Leota, McNaughton, MacDonald & Farry, 2005). However, the present review reveals the need for further research on government policy initiatives to include, educate and empower parents. Most closely aligned to this issue is the report

by Dixon et al. (2007) evaluating the processes and outcomes of the *Promoting Early Childhood Education Participation Project* (PPP). Findings of the PPP showed that Pacific families accessed a variety of early childhood education (ECE) services. Other findings included that: a total immersion programme in the language of the particular ethnic group was seen as a culturally appropriate learning environment; and that Pacific providers identified the need for trained Pacific ECE educators. They also stressed the importance of identifying potential candidates amongst families, encouraging the development of a trained ECE Pacific workforce for their community (in line with the goals of the Ministry of Education's *ECE Strategic Plan*).

There were two exemplars from the literature around early childhood education in terms of provision of early childhood experiences and effective teaching. As recorded in Table 3, Mara and Burgess (2007) describe several strategies used to strengthen language and literacy learning in teaching practice and within the environment and educational programme. This study found successful ways to enhance children's cultural learning. These included developing an environment saturated in the language and symbols of Samoan culture and analysing and adding to ways in which teachers interacted with children. It was found that teachers developed a greater capacity to respond to children's ideas and interests, and children were increasingly able to express themselves in Samoan and English.

Table 4 includes a second small scale action research qualitative project conducted by Luafutu et al. (2011) that focused on assessment practices in two Samoan early childhood education centres. This study highlights the importance of culturally appropriate and responsive assessment practices in early childhood education, and asserts that a Samoan lens on assessment would enhance the relevance to Samoan children's learning and identity development. Within the wider early childhood sector teacher understandings of such practices such as tautua, alofa and fa'aloalo for Samoan children's learning would enhance effective teaching practice.

There is a small body of research on transitions and linguistic and cultural maintenance that has emerged since the previous Coxon et al. review. In 2004, a study reported by Podmore, Taouma and the A'oga Fa'asamoa language nest in Auckland as part of the Centres of Innovation (COI) research initiative (now discontinued), found that children's use of Samoan language was extended as they moved across to the over-age-two areas within the centre. The need for broader community language support for children, such as in the home, was acknowledged, as well as the need to consider parental expectations for their children.

4.2: Pasifika primary education

The ability to make recommendations for primary education continues to be restricted by the limited research at primary level; most published research on primary education is not strongly data based. There is also an absence of information specific to different Pacific groups, with most of the literature using general terms such as 'Polynesian' or even broader categories such as 'Māori and Pacific Island.' Finally, sample sizes in recent research continue to be too small to enable valid generalisation or to investigate impacts of various educational initiatives for different Pacific cultural groups.

The Coxon et al. (2002) review identified the following information gaps in primary and intermediate education research for Pasifika learners.

- **Student achievement measures**: It was noted that more tools were needed to assess numeracy and literacy levels of Pasifika students, including of particular Pasifika groups. Also, in existing measures (eg, asTTle) sample sizes for the different Pacific ethnic groups at years 5, 6 and 7 were regarded as too small to allow for accurate cross-group comparisons.
- **Pedagogical practices**: Research on effective pedagogical practices was needed, with a focus on factors associated with educational success rather than the existing emphasis on factors contributing to educational failure.

- **Bilingualism and language preservation**: Comprehensive research was needed on the impact of primary bilingual education on student achievement and for the preservation of Pasifika languages, including across the transition from early childhood to primary.
- **Intermediate level**: There was little research on different approaches to year 7–8 programmes that might better prepare students for the transition to year 9 and secondary education.

As highlighted in Tables 1–5, each of these issues has received some attention in the literature published from 2002 to 2012. Notably absent, however, is any systematic research and development programme to provide definitive directions for educational policy and practice. A promising exception is the series of relatively small scale studies focused on a Pasifika sub-population—Samoan students: the literacy research described in Amituanai-Toloa and McNaughton (2008) provides empirical evidence supporting bilingual educational approaches that enable students to learn across the curriculum using their first language alongside the development of mastery in English as a second language.

4.3: Pasifika secondary education

The Coxon et al. (2002) report made a number of recommendations for research development in the secondary school sector. Research was seen to be needed in each of the following areas.

- **Subject choices**: For example, the need to look at processes for subject choices at senior secondary school (national qualification levels) for Pasifika students, including the different ways schools provide choice.
- **Effective teaching and learning strategies**: Research to investigate teaching and learning strategies, with a focus on examples of 'best practice', including what worked well across different subject areas.
- **Success and failure**: In terms of Pasifika students (ethnic group/gender), more research which would enable earlier identification of who is succeeding at secondary school and who is not. Another issue where more work was seen to be needed was determining the extent to which learning styles, and the measurement of learning styles, made a difference.
- **Transitions**: Research to investigate transitions for Pasifika learners from primary and intermediate schooling to secondary schooling, in particular, to prevent failure during secondary schooling years and beyond.
- **Bilingualism**: Research to comprehensively investigate bilingualism and the performance of Pasifika students in New Zealand secondary schools.
- **School–community engagement**: Research to identify and describe the features of successful school–community initiatives and how their success is measured.
- **Boards of trustees**: Research with a focus on boards of trustees, including the extent to which BoTs engage Pasifika representatives, and the impact of Pasifika representation.

Despite Cox et al.'s recommendations in the 2002 review, research since then has been limited with respect to processes concerning well-considered subject choices at senior secondary school for Pasifika students. Recent evidence of the need for more sound information in this area comes from the Starpath Project, in which Madjar et al. (2010) identified some impacts of the NCEA system on Pasifika students, including its acceptability to Pasifika students. It was found that Pasifika students preferred internal assessments and the flexibility of choice of subjects. Madjar et al. (2010) advocate that schools recognise and address critical academic pathways for Pasifika students who may otherwise fall behind and be at risk of making inappropriate subject choices, which can have serious implications for later education and career options.

That there is a growing number of studies focused on the most appropriate teaching and learning strategies for Pasifika students is evident in master's and doctoral research theses over recent years. In one research study, the authors stressed the importance of seeking out student voice (Taleni et al., 2007). In other studies of teaching and learning strategies, student and teacher relationships were highlighted in the works of Averill (2009), Siope (2010), Passi (2011), and Fletcher et al. (2011). The relationship between teacher and learner was identified as significant in supporting Pasifika students in the secondary school classroom.

Victoria University's longitudinal research by Meyer and colleagues from 2006 to 2011 has investigated the relationship between the NCEA and student motivation and achievement (Hodis et al., 2011; Meyer, McClure, Walkey, McKenzie & Weir, 2006; Meyer, McClure, Walkey, Weir, & McKenzie, 2009; Meyer, Weir, McClure, Walkey, & McKenzie, 2007, 2009). This multi-year research project has examined the relationship between the NCEA and how students think about their learning and achievement in secondary school. In comparison to self-reports by European students, the influences of both family and friends were reported by Pasifika students to be more important to both their best and worst marks. Pasifika students attributed their best marks less to ability, effort and assessment task difficulty compared to their Asian and European counterparts (Graham et al., 2010; McClure et al., 2011).

From 2002–2012, there has been limited research that specifically identifies the experiences of Pasifika students when undergoing transition from primary school to secondary school. McNaughton's (2011) study found that the transition to secondary school is associated with a shift towards more negative attitudes to academic achievement and lowered achievement patterns, especially for minority and poor students. The importance of positive teacher relationships for Pasifika students' engagement during the transition period is significant. McNaughton (2011) emphasises the importance of years 9–10 in terms of later impact on NCEA performance, proposing the Te Kotahitanga model for Māori as a possible design format for intervention to support Pasifika students as well.

As highlighted by Coxon et al. (2002), the vision of Tomorrow's Schools was to encompass greater involvement of parents with their schools. There is evidence of the important and positive influence for Pasifika students of parent and community involvement within the school setting (Gorinski & Fraser, 2006). Nevertheless, the Education Review office (ERO) 2012 evaluation report, *Improving Education Outcomes for Pacific Learners*, found that when asked about initiatives developed to engage with Pasifika parents and the communities, the majority of schools involved did not have specific initiatives in place for engaging Pasifika communities.

Research in the area of home and school partnership continues to be limited, which may not be surprising given the required commitment of time and effort for schools to provide parents with meaningful opportunities to be involved with their children's education. McNaughton (2011) argues that there is a continuing need for systematic replication and evaluation studies for Māori and Pasifika students. No follow-up studies have been done regarding the longer-term effects of home–school relationships on secondary school student outcomes, nor is there research on the effects of targeted initiatives by secondary schools to enhance home–school partnerships.

There is some evidence since 2002 that some secondary schools have been successful in increasing Pasifika representatives on their boards of trustees (ERO, 2012), although the impact of this representation on the school and its students has not been investigated.

4.4: Pasifika tertiary education

The Coxon et al. (2002) report did not specifically provide future research priority recommendations for the tertiary sector, beyond stating that further research could support representations of Pasifika students across the range of tertiary providers and throughout the various levels of tertiary education. The authors stated that research was needed to address

the disparities in outcomes and that if both participation and outcomes were to be enhanced, there must be increased attention given to transition into tertiary education and to transitions from lower to higher levels of tertiary education.

The concluding statements of the 2002 report highlighted statistical data patterns of student enrolments in tertiary institutes, indicating issues of access, particularly at the secondary to tertiary transition point, and barriers to participation for Pasifika.

Much of the Pasifika tertiary education research from 2002 to 2012 emphasises university study and to some extent study at polytechnic level. Several studies address criteria for effective teaching strategies, student support programmes and intersections of culturally responsive approaches, but there are no long-term studies that evaluate the effects of particular approaches for Pasifika learners.

- **Effective teaching and learning**: More research is needed regarding learner support as part of models for effective teaching and learning. The two-year study by Airini et al. (2009) provided evidence for how non-lecture teaching activities complemented traditional teaching towards Māori and Pasifika student success. The *Success for All* project reported findings about teaching practices in non-lecture contexts seen as having either helped or hindered success in preparing for or completing degree-level study. The authors argued that detailed research is required to uncover the complexities of learning and teaching in tertiary education. The *Success for All* project raises implications for the development and use of evidence to improve teaching and learning practices in universities.
- **Transitions**: There have been several studies on transitions or facilitating access to tertiary education. Most research in this area has examined programmes or initiatives hosted by institutions for the purpose of facilitating student transitions to their place of learning. These studies are generally small-scale and not longitudinal, hence what happens for the student once they enter tertiary study and whether the transition programme had an impact on their tertiary study have not been investigated. One notable initiative combining qualitative and quantitative research approaches is the Starpath Project report (Madjar et al., 2010) of the challenges for students from five mid- to low-decile Auckland schools as they transitioned into university study. The report details clear implications for students, families, schools and universities.
- **Governance and leadership**: Governance and leadership were not specifically referenced in the 2002 report. The definitions of governance and leadership are broad, and publications in these fields reflect this. Information on governance and leadership for Pasifika with reference to the tertiary sector is clearly limited, hence this is a priority for research on effective approaches associated with enhanced Pasifika student participation and outcomes.
- **Academic achievement, numeracy and literacy**: Areas of academic achievement, numeracy and literacy do not weigh in favour of research in the tertiary sector. The studies so far are scarce and very small-scale in terms of participant numbers. There is very little discussion on the outcomes for Pasifika students.

Section 5: Major findings and recommendations from the review across topics and education sectors

This review of the Pasifika education literature, covering the period from 2002–2012, provides a synopsis of research evidence which has or could help inform policy and practice for improved outcomes for Pasifika learners. For the purposes of this report, this evidence has also been compared with evidence existing at the time of the Coxon et al. (2002) review to identify the significant information gaps continuing to now. Based on the information gaps identified, the present report makes recommendations regarding priorities for future research and development to inform educational policy and practice to enhance educational outcomes for Pasifika.

The Coxon review was organised by sector, with individual sections for early childhood education, primary, secondary and tertiary. The present review provides an update of evidence by sector, but it also provides a summary and analysis by the five areas identified in the Ministry's *Pasifika Education Plan 2009–2012* as major areas requiring further investigation and development—governance and leadership, families and community, engagement, literacy and numeracy, effective teaching, transitions.

In this final section, we summarise the results of our literature review with respect to both sector-specific evidence and evidence in the five areas.

Table 6 provides an overview of evidence from the review that currently exists to support educational policy and practice, while Table 7 provides an overview of the significant, continuing information gaps and research priorities identified by this review. Each table is organised so that existing evidence, information gaps, and priorities for research are reported by sector (rows in the two tables) and for the areas for investigation (columns in the two tables). The Executive Summary appearing at the beginning of this report also represents a concise compilation of highlights taken from all of the data in this report (incorporated in Tables 1 to 7 inclusively).

The recommended priorities for further research contained in this report are based on the major findings presented in Tables 6 and 7. The following is a complete list of the recommendations for research from Sections 3.1 to 3.5 to address the identified gaps in our existing knowledge base on effective approaches for improved outcomes for Pasifika learners.

Priority #1: Research on the effective use of data by schools to problem-solve and plan initiatives to support student achievement and staff professional development.

1.1 Investigation of the use and impact of longitudinal monitoring and sharing of individual student achievement and behavioural data across school years.

1.2 Research on the use of student outcome measures by schools over time to evaluate the impact of selected school initiatives (eg, Pasifika student proportionate representation in low, average and high streams at secondary school over time as a function of particular programmes/projects).

1.3 Effective professional learning and development for school leaders and teachers in the use of evidence for educational decision-making (eg, effectiveness of school disciplinary practices based on data rather than perceptions).

Priority #2: Systematic evaluation of models for effective governance relationships with Pasifika communities to inform relevant policy and practice.

2.1 Comparison of alternative approaches to Pasifika community participation in school governance (eg, in schools with high proportion of Pasifika student enrolment, comparison study of the impact of Pasifika representation on the board of trustees with impact of an alternative such as a School Pasifika Advisory Group).

2.2 Research on Pasifika community preferences for involvement in governance relationships with early childhood centres and schools (eg, engaging with community via a talanoa process).

Priority #3: Research on models for home–school relationships associated with enhanced student engagement, retention, and achievement.

3.1 Investigation of the impact of educationally focused church liaison activities in ECE/school settings on home-centre/school relationships and outcomes for children.

3.2 Investigation of the impact of school support for sport and cultural activities with a Pasifika focus on home–school relationships and student engagement.

Priority #4: Systematic evaluation of systems for effective relationships between early childhood education settings, as well as schools, and their Pasifika communities, including connections with Pasifika community leaders.

4.1 Investigation of strategies to facilitate family and Pasifika community involvement in effective transitions from early childhood education to primary

4.2 Investigation of the impact of a more formalised role for Pasifika community leaders on home–centre/school relationships and outcomes for children.

Priority #5: In respect of children who enter educational settings (ECE to secondary) speaking a Pacific language rather than English as their first language: conduct a synthesis of the evidence available on the impact of various programme initiatives on their educational outcomes.

5.1 Comparison studies of the effects of different types of immersion, bilingual, and English language programmes on educational outcomes across one to three years.

Priority #6: Systematic evaluation of approaches for ongoing planning and problem-solving to enhance student achievement based on analysis of longitudinal data for individual students.

6.1 Research at the intermediate and secondary education levels on teacher team planning across the curriculum to enhance literacy within the context of different subjects and courses.

6.2 Research at intermediate and secondary levels on teacher team planning across the curriculum to enhance numeracy within the context of different subjects and courses.

Priority #7: Longitudinal research on effective interventions to enhance motivation and achievement.

7.1 Effectiveness of various approaches to in-school homework programmes (eg, motivation-enhanced versus traditional study skills orientation).

7.2 Impact of involving parents and students in aspirational planning to set achievement targets annually and across school years.

Priority #8: Research on the most important educational outcomes for early childhood education participation relating to successful transitions to primary school.

8.1 Models for parent involvement in transition planning (especially in relation to their children's learning and achievement).

Priority #9: Research on interventions to prepare educators for effective culturally responsive teaching.

9.1 Approaches associated with positive pedagogical changes and enhanced cultural self-efficacy for educational personnel.

9.2 Approaches associated with enhanced educational outcomes for Pasifika children.

Priority #10: Research on culturally appropriate home–educational partnership approaches to support effective pedagogies, evaluated for impact on early childhood and school settings, educators, families, and particularly the children.

10.1 Research on effective approaches for teacher planning and problem-solving alongside parents and family to support and enhance children's learning.

10.2 The impact of teachers informing their practice by seeking parent and family aspirations for their child.

Priority #11: Research on effective teaching and educational support services for Pasifika learners who are gifted and who have special needs.

11.1 Research on culturally appropriate strategies and programmes to support and challenge Pasifika learners who are gifted and talented.

11.2 Research on culturally appropriate strategies and programmes to support and challenge Pasifika learners who have special needs.

Priority #12: Longitudinal evidence on educational outcome indicators and learners' pathways through ECE, school, and tertiary level study or training to inform educational planning, teacher practice, and evaluation of short- and long-term outcomes for learners.

12.1 Investigation of effective approaches for parent and family involvement in their children's learning at key transition points (home to ECE; ECE to primary; primary to intermediate; intermediate to secondary; secondary to tertiary).

12.2 Research to define and measure meaningful educational outcome indicators for Pasifika learners at different transition points across educational sectors, as perceived by students, family/parents, the Pasifika community, and educationalists from the sectors.

Priority #13: [In relation to effective teaching in particular], formal evaluation of programme initiatives designed to facilitate transitions across sectors incorporating long-term educational outcomes as well as short-term impact on learners.

13.1 Formal evaluation of specified, intended educational outcomes for Pasifika learners as a function of participation in programme initiatives and projects.

Priority #14: There is urgent need for more longitudinal data that will allow us to follow Pasifika learners' pathways through ECE, school, and tertiary level study or training, to assist in educational planning, and to enable problem-solving and evaluation of the short- and long-term outcomes for these students.

14.1 To be effective, teacher planning across school years needs to be based on longitudinal data showing individual student progress from year to year within the sector (eg, across the junior and secondary school years).

14.2 Collection of rigorous data and efficient data retrieval systems will enable educators and families to make well-informed judgements about effective interventions for learners.

Priority #15: There is urgent need for formal evaluation of programme initiatives intended to facilitate Pasifika students' transitions across sectors that incorporate long-term outcomes as well as short-term impact on students.

15.1 To fulfil the urgent need for evaluation of programme initiatives, future project initiatives will need to require from the outset that evidence of impact on student outcomes is specified, collected, and evaluated.

15.2 There needs to be enhanced utilisation of independent and external evaluations following appropriate quasi-experimental designs whenever there is public funding for large-scale centre and school projects designed to improve student outcomes.

Table 6: Evidence from the review to inform and support Pasifika educational policy and practice

Sector	Investigation area				
	Governance and leadership	**Families and community engagement**	**Literacy and numeracy**	**Effective teaching**	**Transitions**
Early Childhood		• ECE linkages with church are valued by families to support children's learning • Meaningful linkages between home and family are valued by Pasifika parents, families and communities • There is a need for deeper and more widespread teacher understandings and skills in culturally responsive approaches and linkages with Pasifika parents, families and communities at the ECE level	• Multiple sites supporting literacy across Pasifika language nests, home, and church Sunday school viewed by participating families as crucial to literacy development and language preservation	• Teacher understandings of tautua, alofa, and fa'aaloalo need to underpin Samoan children's learning	• Transition support between ECE and schools for bilingualism is related to successful language maintenance at junior primary
Primary and Intermediate		• School engagement with families and community is viewed as essential by parents to support children's learning • There is a need for deeper and more widespread teacher understandings and skills in culturally responsive approaches and linkages with Pasifika parents, families and communities at the primary level	• Bilingual support while children learn English alongside work in their first language promotes academic achievement and literacy skills • Culturally responsive pedagogy in mathematics is positively related to development of numeracy skills • Pride in their Pacific culture, and collaborative learning in the classroom, are viewed by children as important for the development of their reading and writing skills • Participation in the Ministry's Numeracy Development Project was related to substantial improvements in mathematics for Pasifika students in the IEA Third International Mathematics and Science Study (TIMSS)		

Table 6: Evidence from the review to inform and support Pasifika educational policy and practice—*continued*

Sector	Investigation area				
	Governance and leadership	**Families and community engagement**	**Literacy and numeracy**	**Effective teaching**	**Transitions**
Secondary	• Limited subject choices in lower decile schools that enrol Pasifika students compounds other limited opportunities for these students	• Pasifika parents support NCEA assessment design features for their children • Pasifika clubs in school support connections with community, which in turn facilitates Pasifika community–school relationships	• Student self-efficacy and achievement in mathematics, writing and reading has been found to relate strongly to teacher caring and culturally responsive pedagogies • In a number of studies, Pasifika secondary students report motivation orientations predictive of low achievement • High achieving Pasifika students attribute success to self-efficacy, parental support, cultural identity, and religion • Students who speak their Pacific language and express cultural pride report higher effort at school than those who do not	• Teacher caring for their learning is viewed by Pasifika students as a key motivator to enhance achievement • Pasifika students' participation in a motivation-enhanced study skills programme was related to higher NCEA attainment • Disproportionate enrolment of Pacific students in unit standards rather than achievement standards limits opportunities and outcomes	• Targeted academic counselling including goal setting and course selection has a positive impact on Pasifika students' completion of their schooling and transition to further education, training, or work
Tertiary		• Engagement with Pasifika communities viewed by tertiary students as important for successful study		• Students favour discursive and flexible teaching approaches in tertiary coursework • Pasifika graduates perceive some support programmes as communicating low expectations for their learning • Dispositions, skills and connections with students are key for effective mentoring and tutoring for Pasifika students	• Increased availability of NCEA achievement and unit standards at school predicts lower achievement for Pasifika students in contrast to findings for other groups • Career awareness initiatives in schools are needed to help students and their families understand a wider range of possible post-secondary study and career options.

Table 7: Significant information gaps identified in the Pasifika education research literature as a basis for establishing priorities for further research

Sector	Investigation area				
	Governance and leadership	**Families and community engagement**	**Literacy and numeracy**	**Effective teaching**	**Transitions**
Early Childhood	• Research needed on Pasifika approaches to governance and leadership especially hierarchy and management structure supports • Appropriate research on support for Pasifika language preservation and children's first language development should be clarified and communicated across ECE • Research and evaluation on the effectiveness of current government systems and policies for development of Pasifika infants, toddlers and young children is needed	• There is a need for research to clarify how meaningful linkages between ECE and home/Pasifika parents, families and communities can be established and maintained • There is a need for research to clarify and extend teacher understandings and skills in culturally responsive approaches and linkages with Pasifika parents and communities • Research is needed on family and community roles in ECE and impact on learning outcomes for children • Research to ascertain what parents/families want ECE centres and schools to provide to help their children achieve their aspirations	• Appropriate research designs with validated children's learning measures should be required to evaluate effectiveness of programme initiatives • Research is needed regarding Pasifika cultural definitions of ECE literacy to support positive cultural and linguistic learning outcomes for Pasifika children	• Research is needed on culturally responsive pedagogies for early childhood staff • Research is needed to investigate the impact of ECE settings on cultural, traditional knowledge, and home language learning for children • Evidenced-based standards to define and investigate supports for quality teaching and learning in Pasifika ECE are needed	• Research is required on Pasifika children's transitions between language nests (and ECE centres generally) and primary school • Research is needed to investigate transitions from home to Pasifika early childhood education centres • There is a need for research on other models of ECE provision for Pasifika
Primary and Intermediate	• Research is needed on Pasifika language preservation; the role of children's first language in teaching and learning in primary school also needs to be clarified	• There is a need for research to clarify and extend teacher understandings and skills in culturally responsive approaches and linkages with Pasifika parents and communities • Research is needed on family and community roles to support primary education and impact of different home–school partnership approaches on learning outcomes for children	• Appropriate research designs with validated student achievement measures should be required to evaluate effectiveness of programme initiatives • More research is needed on effective strategies to enhance literacy across the curriculum (in science, social studies, and so on)	• There needs to be a larger body of evidence to support teacher planning for individual students across the primary–intermediate years; this evidence will need to come from the development of usable data systems • There is a need for research/evaluation-based information to inform teacher education and professional development for effective teaching of Pasifika bilingual learners	• Research with a specific focus on Pasifika learners is needed on the transition from primary/intermediate to secondary

Table 7: Significant information gaps identified in the Pasifika education research literature as a basis for … further research—*continued*

Sector	Investigation area				
	Governance and leadership	**Families and community engagement**	**Literacy and numeracy**	**Effective teaching**	**Transitions**
Secondary	• Research is needed on the impact of NCEA design changes on Pasifika course choice opportunities and NCEA certificate attainment (eg, review of standards) • Systematic investigation is needed regarding equity of opportunity for high achieving Pasifika learners to attain course and certificate endorsements (eg, limited school offerings) • Research is needed to investigate the issues that schools have in successfully using their Student Management Systems and what they need to overcome these	• Limited information is available regarding existence, support and impact of school–community networks on Pasifika student educational outcomes • Formal evaluation is needed of existing Pasifika home–school liaison approaches • More research is needed on culturally appropriate study skills and homework programmes that have family and community support	• There needs to be a requirement for school use of valid research designs and achievement measures to enable formal evaluation of initiatives to promote student achievement in different curricular domains • Research is required across a diverse range of secondary school subjects, using strengths-based frameworks to communicate high expectations of positive attitudes about Pasifika learners	• More research on practice of teachers who successfully employ robust data to effectively plan for individual Pasifika students • There is a need for information on the sorts of systems needed to provide academic advice to Pasifika students and to assist them and their families to set individual goals for achievement across the secondary years • Research including individual Pasifika student achievement data over time is needed for the development of mechanisms to provide systematic opportunities for teacher planning across subjects and years	• There is little information available regarding transition planning for secondary to tertiary or for secondary to work based on evidence of individual achievement • To build on findings from the Starpath Project (2010), more research is needed on what supports for students from different quintile schools would be most effective in supporting them to successfully undertake university and degree level study • Further research is needed on the effectiveness of careers advice to Pasifika secondary students, including investigation of expectations and aspirations communicated to students and their families

Table 7: Significant information gaps identified in the Pasifika education research literature as a basis for … further research—*continued*

Sector	Investigation area				
	Governance and leadership	**Families and community engagement**	**Literacy and numeracy**	**Effective teaching**	**Transitions**
Tertiary	• Research is needed on the nature of governance (policy, strategic plans, etc) in tertiary education organisations and impact on Pasifika learner outcomes • More research is needed on the role of leadership (eg, family member, church minister, community leader) on Pasifika learners' achievement • Research is needed on leaders who have led and demonstrated significant institutional changes on how they have championed change for Pasifika student development	• As little is known regarding the impact of families and communities on outcomes for Pasifika learners at tertiary level, research in this area is required • Information is needed regarding effective strategies for tertiary education organisations to engage with families and communities to support Pasifika learner success	• Intervention research is needed to validate successful learning strategies to enhance Pasifika students' literacy and/or numeracy for tertiary study success	• Not much is known about 'what works well' for Pasifika tertiary students, including information on key characteristics of successful learning programmes • Research approaches (re effective teaching) need to appreciate and build on strengths of Pasifika students and their communities • Promising areas for investigation include research on the motivational, leadership, financial and cultural issues that are key to enhancing tertiary achievement for Pasifika students • Systems are needed for long-term tracking of data on Pasifika students' achievement, especially for specific Pacific ethnic groups.	• There should be systematic evaluation of the effectiveness of programmes designed to support tertiary learners as an essential step in developing an empirical foundation for policy and practice rather than relying on 'expert opinion' pieces • Despite significant Pasifika participation in tertiary level part-time study, too little is known about whether this helps lead to improved outcomes/qualifications for Pasifika • More research is needed involving tertiary learner narratives of their own personal views of successful strategies for transitions from secondary to tertiary • There needs to be more research focused on strategies for international students from the Pacific region to transition to tertiary study in New Zealand, such as in universities

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