cogent
education

EDUCATION POLICY | RESEARCH ARTICLE

Identifying disability-inclusive indicators currently employed to monitor and evaluate education in the Pacific island countries

Umesh Sharma[1], Chris Forlin[2]*, Beth Sprunt[3] and Laisiasa Merumeru[4]

*Corresponding author: Chris Forlin, Bayswater, Western Australia 6053, Australia
E-mail: chrisforlin@outlook.com

Abstract: Fourteen member countries of the Pacific Islands Forum have adopted The Pacific Education Development Framework as a means of improving quality of education across the region. Within this framework, special education and inclusive education are seen as priority areas that endorse a rights-based approach to education. Aligned with other Pacific regional advances for improving the measurement of the effectiveness of this Framework, is the development of a set of indicators to measure efforts towards disability-inclusive education specifically in the Pacific islands. The aim of this study is to identify existing measures that governments currently employ to report against education outcomes. Data were collected by written responses from relevant ministries in the 14 Pacific member countries to a set of questions specifically developed to address this aim. This paper provides an analysis of these surveys and discusses how these data are informing the development of the indicators to ensure the provision of quality education for children with disabilities in the Pacific islands.

ABOUT THE AUTHORS

Umesh Sharma is associate professor in the Faculty of Education at Monash University, coordinating special education programmes and leading an AusAID Development Research Awards Scheme project across 14 Pacific countries to develop a set of contextually specific disability-inclusive education indicators.

Chris Forlin is an international education consultant, professor and researcher based in Perth, Australia, providing leadership in research in education reform for special and inclusive education with widespread extensive international experience in education working in the field of teacher education.

Beth Sprunt is a senior technical advisor in Disability Inclusive Development at the Nossal Institute for Global Health, The University of Melbourne, providing technical support for capacity development, advice and research related to disability-inclusive development in DFAT's programmes.

Laisiasa Merumeru is the Disability Coordination Officer, Pacific Islands Forum Secretariat involved with education development within the Regional Disability Strategy and focusing on monitoring disability inclusive development trends in the Pacific.

PUBLIC INTEREST STATEMENT

The Pacific island countries have worked together to develop a framework for improving the quality of and access to education across the region. The education of children with disabilities is a priority within this framework. Countries are in the process of preparing indicators that will enable them to measure their progress towards this aim. This research is a collaborative enterprise between these countries and international partners. This initial study looks at how countries in the Pacific are already measuring educational outcomes for children. By reviewing current practices, this will inform the development of relevant and contextually appropriate indicators. Being able to record improvements in education across the region at district, school and community levels will ensure that the most vulnerable children, who have previously gone unnoticed, will become more visible. This will open up opportunities for allowing them the same access to education as their peers.

cogent ·· oa

Subjects: Education; Education & Development; Education Policy & Politics; Educational Change & School Reform; Educational Research; Inclusion and Special Educational Needs; Sustainability Education; Training & Leadership

Keywords: disability; Pacific islands; disability-inclusive education; indicators

1. Introduction

According to the Incheon Strategy (UNESCAP (United Nations Economic & Social Commission for Asia & the Pacific), 2012), there are 650 million people with disabilities in Asia and the Pacific. Within the Pacific islands, this number is considerably smaller and estimated in 2013 to be approximately 17% of the 10 million people in the region (Secretariat of the Pacific Community, http://www.spc.int/sdd/en). For many of the Pacific islands, total populations are less than 100, 000 (e.g. Cook Islands, FSM, Kiribati, Nauru, Niue, Palau, RMI, Tonga and Tuvalu), with countries such as Niue having a population of only 2,000. The existing data about students with disabilities in regular primary and secondary schools in the Pacific islands are, however, currently very limited and only just beginning to be collected in many regions (Pacific Islands Forum Secretariat, 2009b). It is acknowledged that at present access to basic education in the Pacific islands is particularly challenging for girls, those living in poverty and those with disability, especially in remote areas (Pacific Board for Educational Assessment, Secretariat, 2013). People with disabilities are seen as the poorest and most marginalized members of Pacific island societies with an estimate of less than 10% of children/youth with disability having access to any form of education (PEDF 2009–2015, 2009b). In addition, negative cultural attitudes regarding people with disabilities are still prevalent (Sharma, Loreman, & Macanawai, 2015).

1.1. Prioritizing inclusive education in the Pacific islands

Through the PEDF 2009–2015 (Pacific Islands Forum Secretariat, 2009b); approved by all Pacific island education ministers in 2009, special education and inclusive education is seen as a priority in this region endorsing a rights-based and inclusive approach to disability and education (Cross-Cutting Theme 2). The policy Framework is grounded in two sets of imperatives, (1) the commitments made by Pacific countries to global education calls for action and (2), the national and regional response to education in the Pacific region. The global commitments include the Education for All agenda and goals, the Millennium Development Goals relating directly or indirectly to education, the UN literacy decade and also the UN decade of education for sustainable development (Pacific Islands Forum Secretariat, 2009b). The framework provides a vision for quality education for all in Pacific island countries with a mission to "Enable each Pacific learner to develop all his/her talents and creativities to the full and thereby enabling each person to take responsibility for his/her own life and make a meaningful contribution to the social, cultural and economic development of Pacific society" (PEDF, 2009b, p. 5).

The PEDF indicated a strengthened commitment by Pacific island governments to the education of children and youth with disabilities, building on the advocacy and support undertaken by non-governmental organizations, community groups, parents and professionals working in the area (Puamau 2007). Despite commitment to implementing disability-inclusive education, measurement of progress has been extremely limited (Forlin, Sharma, Loreman, & Sprunt, 2015); governments are, thus, very keen to establish a means of measuring progress towards disability-inclusive education and are strongly supportive of the development of indicators for achieving this. They are also concerned to ensure that indicators are developed that are appropriate to the specific needs of the Pacific island countries rather than adopting Western approaches that potentially lack cultural sensitivity.

The impact of colonial influence on education in the Pacific has been documented over decades (Scaglion, 2015; Thaman, 2015) and various authors have begun to examine its impact more specifically on inclusive and special education policies and approaches (Le Fanu & Kelep-Malpo, 2015; McDonald & Tufue-Dolgoy, 2013; Miles, Lene, & Merumeru, 2014). Pacific inclusive and special

education policies have undoubtedly been influenced by Western thinking. For example, through missionary and non-governmental organizations establishing many of the earliest services for children with disabilities and the influence of donor funding and monitoring and evaluation agendas. In addition, these have been impacted by the widespread use of the UNESCO inclusive education manuals (UNESCO, 2004, 2005) and through postgraduate education in Western universities of many of the regions' senior most inclusive education academics and policy officials. However, many of the policies themselves have been written by Pacific Islander experts and it has been argued that inclusive education is in reality a very Pacific Islander approach to education (whereby everyone in the community traditionally received education in ways of contributing to the community), simply with a new name (Merumeru, 2006).

1.2. Disability-inclusive education

The 14 member countries of the Pacific Islands Forum adopted the PEDF Framework and agreed to work towards inclusive education (Pacific Islands Forum Secretariat, 2009a). This is defined as:

> … an approach which seeks to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalisation and exclusion. Inclusive education implies that all learners with or without disabilities are able to learn together through access to common ECCE provisions, schools and community educational settings with an appropriate network of support services (PIFS, Cross-Cutting Theme 2: Students with special educational needs and inclusive education, 2009b, p.11).

Disability-inclusive development (Australian Government Department of Foreign Affairs & Trade, n.d.) as it applies to education, is the process of identifying and addressing barriers to quality education for all children, including those with disabilities or special educational needs. To ensure that all students, including those with a disability, are able to access high-quality equal educational opportunities commensurate with their specific needs, a focus on disability-inclusive education is important. As our project will be focusing specifically on disability-inclusive education in the Pacific region, we define this as providing high-quality education to children with disabilities alongside their same aged peers in regular schools (Sharma, Forlin, Marella, Sprunt, & Deppeler, 2016).

When successfully implemented, disability-inclusive education results in children with disabilities (1) attending regular schools (2) participating in all school activities (3) being accepted by the schooling community, and, (4) achieving both socially and academically (Florian, 2009; Frederickson & Cline, 2009; Jorgensen & Lambert, 2012).

Successful implementation requires systems to change to meet the needs of an individual child rather than asking the child to change (Forlin, 2013; Lalvani, 2013). This change should include enacting national inclusive education policies, revising teacher education programmes, changing schooling culture and practices, and supporting school staff (Ainscow, Dyson, Booth, & Farrell, 2006). Inclusive education can also involve special schools working in partnership with regular schools to ensure that students with disabilities are included in the regular school community (Lupart & Webber, 2012).

1.3. Existing processes for reporting about disability-inclusive education

A number of processes already require governments in the Pacific islands to report against disability-inclusive education indicators including national education policies, the monitoring and evaluation of the PEDF and the Pacific regional strategy for disability (Pacific Islands Forum Secretariat, 2009a, 2009b), education for All (e.g. Government of Fiji Ministry of Education, National Heritage, Culture & Arts, 2008; Government of Samoa Ministry for Education, Sports & Culture, 2007), performance assessment frameworks from key donors; documents discussing disability indicators related to the Millennium Development Goals, and Post-2015 sustainable development goals (United Nations, 2012), and the Convention on the Rights of Persons with Disabilities (United Nations, 2007).

1.4. Developing indicators for measuring progress

In partnership with Monash University, the CBM-Nossal Institute Partnership for Disability Inclusive Development (The University of Melbourne), the PIFS and the Pacific Disability Forum, a research project is underway to develop a set of indicators to measure efforts towards disability-inclusive education specifically in the Pacific islands (Forlin et al., 2015; Sharma et al., 2016). In order to ensure that the indicators were relevant to the context and acceptable to the people of the Pacific, three key principles were adopted to guide the development of indicators. These principles were "collaboration", "a need for systemic change" and "nothing about us, without us". Key stakeholders from the regional Pacific organizations worked from the conceptualization of the project to the final stages. Pacific researchers collected and analysed data with support from researchers in Australia and other countries. More detail about the process adopted to develop the indicators is provided elsewhere (Sharma et al., 2016). These culturally relevant indicators will assist countries to evaluate their progress towards inclusion and to develop further plans and targets for providing quality education for children with disabilities. This research is aligned with other Pacific regional processes for improving the measurement of the PEDF.

Pacific island governments have signed and/or ratified various agreements with implications for ensuring a quality education for children and youth with disabilities, which have associated implications for reporting progress against those agreements. The systems to gather the data are not necessarily in place, however, it is important to clarify and document the progress towards these agreements, so that governments can decide which indicators they will prioritize to measure progress as they move forward, and make informed choices about which data systems they choose to strengthen.

It is proposed that the use of a set of locally developed indicators for disability-inclusive education may address the challenges faced in measuring progress and reporting on the range of policies and frameworks related to education of children with disabilities. This is important as previously global measures have been considered to be "not that useful to the Pacific in tracking its effort to reduce poverty and improve the quality of life of the people of the Pacific (both at a country and a regional level). This is largely because many of the things that are important in the Pacific are not adequately reflected in traditional measures of development" (Pacific Plan Review Note 6, 2013, p. 3).

The aim of this paper is to report the results of information gleaned from governments in the 14 participating Pacific island countries to gain an understanding of what processes are already in place to record information about the education of students with disabilities and what indicators are currently being used to monitor and evaluate education in the region. The process reported here is one of the methods utilized to ensure that the development of disability-inclusive indicators is contextually and regionally appropriate.

2. Method

2.1. Data collection

A set of questions were produced in collaboration with the PIFS members and representative stakeholders to be completed by key stakeholders from all 14 Pacific island countries to obtain information about current practices that could inform the development of indicators for measuring disability-inclusive education. A combination of categorical and open-ended questions was employed throughout. Ethics clearance was obtained through the university and the country representatives sought permission from the relevant ministries in each of the 14 countries for the officers to respond to the questions.

Three sets of questions were asked related to: (1) National recording and reporting of educational outcomes of students; (2) Professional development of staff about disability-inclusive education and (3) Policy and role of special schools. In particular, our focus was to ascertain what data each

country currently collects about educational outcomes for all children and specifically children with disabilities to inform the development of regional indicators of disability-inclusive education.

In Section 1, 16 questions were introduced by the phrase "The purpose of this section is to find out what type of information countries of the Pacific are already collecting with regard to recording educational outcomes of all students. Please provide details in relation to the following": and were related to enrolment (e.g. the number of students enrolled in each school), attendance (e.g. student attendance in each school), retention (the number of students with disabilities who complete primary school and/or secondary school), transition (e.g. the number of students with disabilities who complete early childhood care and education/kindergarten and enrol in primary school; and the number of students with disabilities who transition from primary school to secondary school), drop-out (e.g. the number of students with disabilities who drop out from school), and out of school children (e.g. Are you aware of any efforts in your country to capture data on the number of out-of-school children with disabilities?). When replying yes to an item, respondents were asked to state where this information is recorded and its current purpose. Information was also requested about current national testing procedures e.g. Do you have a national literacy (& numeracy) test? If yes, at what grade(s) is it administered? All questions asked respondents to state what groups, if any, they disaggregated for e.g. gender, disability, ethnicity, or linguistic group.

We also sought information in Section 2 about current professional development opportunities for teachers regarding whether they recorded training practices to upskill teachers and principals about disability-inclusive education. This section contained six questions and was led by the statement "The purpose of this section is to find out information about different types of professional development activities undertaken by school staff in your country". Data were collected in Section 3 on policies and the perceived role of existing special schools with supporting disability-inclusive education. This was introduced by the statement

> The PEDF approved by all Pacific Island Education Ministers in 2009, identifies special education and inclusive education as a priority and endorses that a rights based and inclusive approach to disability and education is adopted by Pacific countries. We are interested in your opinion

Section 2.1 contained six questions. In addition, demographic data were collected.

The Associate Investigators in each country checked responses for accuracy and followed up with participants for further clarification if required. As the final number of responses was small (*N* = 16) and information was sought on country data, these were collated by one of the research teams using a spreadsheet format. Data were amalgamated to provide an overview of existing practices in each country in regard to the collection and reporting of information about students and whether these data were disaggregated according to disability.

2.2. Participants

Data were to be collected from each of the 14 countries on government processes for recording data. This required government officials to complete the survey. The time taken to do so varied depending upon availability of data requested. The majority of the respondents were involved with monitoring and evaluation for special or inclusive education in their respective countries. Just under one-half of them were responsible for data collection and one-third also oversaw teacher education and the training of teachers. Only four of the respondents who were involved with data collection were also undertaking data analysis. A further three respondents undertook data analysis although they were not involved in its collection. Thirteen of them were engaged with policy-making and six were responsible for health or rehabilitation services for people with disabilities. Eleven were involved with budgeting in their role. In addition, one respondent from Samoa was involved with vision and hearing services and one person from the Cook Islands with school quality assurance.

2.3. Procedure

Working through country representatives who had been appointed locally as Associate Investigators to support the project, an indicative list of stakeholders to respond to the questions was suggested. These included the Ministries of Education, Health, Community Affairs, Internal Affairs, or Social Welfare (as these were the relevant Ministries responsible for disability). It was proposed that at least five senior officers in the various Ministries per country should be asked to respond to the questions to ensure that they had sufficient knowledge of existing countrywide practices. A purposeful sampling technique was employed in order to target relevant respondents. Country representatives were asked to provide the names and contact details of relevant people and the questions were sent directly to these people by the research team. The country representatives supported the collection of data by providing a follow-up to encourage responses to be submitted within two weeks of receipt.

Collection of the completed data was, nonetheless, very protracted spanning a two-month period. The local Associate Investigators contacted participants through email and by telephone calls. They also visited the Ministries to meet personally with participants to encourage participation. Due to the slow return rate and the time-consuming efforts of the Associate Investigators, it was deemed important to allow this additional time to capitalize on the maximum number of country responses. The PIFS contacted the Ministries in countries where the Associate Investigators could not follow up for data collection.

The responses were completed by representatives from different Ministries, Departments or agencies at various levels of employment. Some data were conflicting, possibly due to the different focus of those responding and thus their different knowledge base. When necessary, further clarification was sought from the country representatives to gain confirmation of the responses. Data were amalgamated from each country to provide an overview of existing practices across the three sets of questions.

3. Results

The results reported here reflect the information received from representatives from different groups within the different countries. Whilst every attempt has been made to receive information from the relevant Department or Ministry of Education, we are reliant on the respondent's accuracy of this data. Information received from Palau and Kiribati was not provided by the Government Ministry or Department of Education but by other sources.

3.1. Information collected about students

The first section of the survey investigated the types of information countries of the Pacific are already collecting with regard to recording educational outcomes of students. Further information was sought about whether this information was being disaggregated according to categories of students such as gender, ethnicity, disability, linguistic or other groups.

3.1.1. National literacy testing

Of the 14 countries, all of them with the exception of Palau and Papua New Guinea (PNG) indicated that they had a national literacy test (Table 1). Ten of the countries held their first national literacy test in the fourth year of primary school, Republic of Marshall Islands (RMI) held their first test in Primary 3 and Federated States of Micronesia (FSM) in Primary 6. A further national literacy test was held in Primary 6 by nine of the countries. With the exception of Palau who did not have a national literacy test and Fiji, RMI, Samoa and Tonga who held three national literacy tests in primary school, all of the other countries held two either in Primary 4 and 6 or Primary 6 and 8. Few countries held national literacy tests in secondary schools. The exceptions were the Cook Islands which held one in Secondary 2 and 5; RMI in Secondary 3 and 6. Nauru was somewhat different, as examinations were given every year and at their exit grades in Years 3, 6 and 9 (Secondary 4) on literacy and numeracy benchmarks.

cogent • education

Table 1. National literacy and numeracy testing in primary schools by country						
Country	**Primary 3**	**Primary 4**	**Primary 5**	**Primary 6**	**Primary 7**	**Primary 8**
Cook Islands	Num	Lit		Lit Num		
Fiji		Lit Num		Lit Num		Lit Num
FSM		Num		Lit Num		Lit Num
Kiribati		Lit Num		Lit Num		
Nauru	Lit Num	Lit Num	Lit Num	Lit Num	Lit Num	Lit Num
Niue*		Lit Num		Lit Num		
Palau**						
PNG**						
RMI	Lit Num			Lit Num		Lit Num
Samoa		Lit Num		Lit Num		Lit Num
Solomon Islands		Lit Num		Lit Num		
Tonga		Lit Num	Lit Num	Lit Num		
Tuvalu		Lit Num		Lit Num		
Vanuatu		Lit Num		Lit Num		

Notes: FSM: Federated States of Micronesia; PNG: Papua New Guinea; RMI: Republic of Marshall Islands.

*Niue only has 2 schools.

**Palau & PNG indicated they did not have a national literacy test Lit = literacy; Num = Numeracy.

3.1.2. National numeracy testing

Similar to the national literacy testing, all countries except Palau and PNG administered a national numeracy test (see Table 1). Ten of the countries gave their first test in Primary 4 with RMI and the Cook Islands using Primary 3. Fiji, FSM, RMI, Samoa and Tonga held three national numeracy assessments, whereas the other countries held two, either in Primary 3 and 6 or Primary 4 and 6. As with the national literacy testing for secondary schools only three countries offered national numeracy tests in secondary schools. The Cook Islands held one in Secondary 5; RMI held two in Secondary 3 and 6; and Niue in Year 9.

3.1.3. Disaggregating data for national testing

Regarding whether the data collected for the national literacy and numeracy tests were disaggregated according to categories, just over one-half of the countries did this. Eight countries recorded gender (Nauru, Fiji, Kiribati, RMI, Samoa, Tuvalu, Cook Islands & Tonga [for literacy only]). RMI and Tonga recorded disability, RMI and Fiji recorded ethnicity and RMI and the Cook Islands [for literacy only] recorded linguistic group. Kiribati and the Cook Islands also sorted according to district. In the Solomon Islands, all students were included in Annual Class-based assessments.

3.1.4. School enrolment

All countries except FSM reported collecting information on the number of student enrolments in schools. With the exception of Tonga and Kiribati, these countries reported collating data according to gender. The Departments of Education in four countries reported disaggregating data according to disability (RMI, Tonga, Vanuatu, Niue). Some other respondents also responded that they collect information about disability from their data for their specific schools or agencies e.g. the Palau Community Action Agency/Head Start Program; the Special Education Program in the Ministry of Education in FSM; and Fusi Alofa (Department of Education) in Tuvalu. The four countries of Fiji, RMI, PNG and Niue also reported collecting information about ethnicity. RMI identifies linguistic group and PNG records local vernaculars that are used to teach in elementary schools.

3.1.5. School attendance

Kiribati and Vanuatu indicated that they did not collect information on student attendance in each school, whereas, all other countries confirmed these data were recorded. Nine countries that did

collect data disaggregated these according to Gender (Fiji, RMI, Samoa, Palau, Nauru, Niue, Solomon Islands, PNG, Tuvalu). Eight countries included information on disability (Fiji, RMI, Samoa, Palau, Tonga, Solomon Islands, PNG, Tuvalu); five on ethnicity (Fiji, RMI, Palau, Niue, PNG) and one on Linguistic group (Palau).

3.1.6. School dropouts

Eight of the countries indicated that they collect this information, although for Fiji this is only done at the individual school level. In the Solomon Islands, these data are collected by SIEMS and in Samoa by the MESC. In Niue, the data are collected as narratives. It was suggested by comments on some surveys that this is an area that needs attention in some countries, especially in countries such as Niue where they advised that education is still in its infant stages of designing specific templates for specific data-sets/requirements.

3.1.7. Literacy and numeracy outcomes

The information collected about the literacy and numeracy levels of students with disability seemed to revolve mainly around class assessments, observation, participation in national testing, and in particular an analysis of achievements of the students' individual education plan goals. One country was undertaking quarterly progress reports at a school level, whilst another had annual reviews of the individual education plan.

3.1.8. Other data sources

According to the respondents a range of other data sources were used to collect information about students with disability. These varied enormously but included the use of school improvement plans, individual learning planning, classroom-based and school-based assessments, observations, child assessment profiles, early screening instrument-revised (ESI-R), atypical behaviour scale, creative curriculum-teaching strategies GOLD assessment, running record formative assessments, external examinations, and summation assessment at the end of each term. In Fiji, for example, opportunities are provided for students in special schools to showcase their talents and skills as a means of measuring learning outcomes. In special schools, most students have an individual education plan which is monitored and adjusted regularly and which informs the measurement of achievements.

It would seem that all countries are struggling in regard to measuring outcomes for students with disabilities. Responses are varied and inconclusive. The exception to this is where national exams are set by governments and results are collated nationally, as in the national literacy and numeracy tests done in most countries. Although at present very few countries are disaggregating this data according to disability, where this is linked to data in the national EMIS, as in Fiji, it is possible to identify literacy and numeracy learning outcomes for students with disabilities. Similarly, there is no consistent information regarding transitions for students with disability other than what is recorded at an individual school level.

3.1.9. Other information collected

When asked whether countries collected any other relevant information about students with disabilities, eight said they collected information about whether the children used braille and nine the number of students who used sign language (Figure 1). Eight countries also collected data on the use of assistive devices or technology by the students. Some countries collected information about students using wheelchairs, or other mobility devices and those receiving teacher aid supports or requiring an interpreter. Nauru and RMI collected information on the type of disability of the child and Samoa recorded those requiring speech or physical therapy. Samoa also kept records of students involved in the Special Olympics. As most EMISs in the Pacific currently record no information other than type of disability, it is possible that the data collection reported by survey respondents relates to local databases that may represent a subset of the student population.

3.1.10. Country efforts to capture national data on people with disabilities

According to the data collected on the survey, most countries acknowledged that they were starting to consider this issue but few had actually already established these processes. The countries that did indicate that they had undertaken some investigations were Fiji, FSM, Samoa, Nauru and Tuvalu. In Fiji, a census was conducted by the Fiji National Council for Disabled in villages and settlements in 2006. In FSM, they have 'out of school child find' data, which is collated annually in collaboration with public health, land grant, and other community organizations. In Samoa, this occurs through Nuanua o le Alofa, an organization for the National Council of people with disabilities and from housing and population census. In Nauru, the information is available through their Census Bureau and possibly from non-governmental organization groups. In Tuvalu, this is captured at the disability school (Fusialofa).

The indicators used by countries to collect information about the implementation of inclusive or special education varied considerably. Mainly countries kept records of the number of students with different disabilities attending schools with some disaggregating data according to the percentage of time spent inside a regular or special class. Annual Statistics of clients and schools served by research centres, information from parents, observation by teachers, feedback from volunteers who are trained in area, and a record of schools requesting assistance according to disability needs, were also cited. In FSM, they report against the US *Individuals with Disabilities Education Improvement [IDEA] Act,* 2001) regulation and requirements. Samoa reported using the *Index for Inclusion* (Booth & Ainscow, 2002) and Tuvalu reported recording learning outcomes achieved by students. Tonga identified the number of children diagnosed by a paediatrician, and the Cook Islands recorded the training, number and type of teacher aides.

3.1.11. Educational management information system (EMIS): Information about students with disabilities

Eight countries indicated that their Ministry of Education recorded some data about students with disability in the EMIS. In Fiji, these data were recorded in the Fiji Educational Management Information System (FEMIS). Other countries indicated that they were currently reviewing this. Nauru and RMI reported collecting information on the type of disability e.g. Hearing impairment, visual impairment, autism, intellectual disability, fine motor skills, remembering/concentration and attendance. In the Cook Islands, the information collected related solely to the provision of additional staffing to support these students (which also meant additional funding).

3.2. Information collected about professional development for educators

The second set of questions sought information about the type of professional development activities that were undertaken by educators such as involving teachers participating in workshops, short courses, further study, or other activities related to disability-inclusive education. Table 2 records the countries that collate information regarding the professional development of teachers and school principals/deputies/school leaders, the type of professional development undertaken and whether this is about inclusive or special education.

If the organization who was responding to the questions collected information on professional development, they were asked to identify how or where it was recorded. Six countries indicated that the data were kept by the relevant Ministry of Education in the staff development or special education office, inclusive education unit, the school operation division, human resources management or the teacher training development division. In Fiji the information was updated into FEMIS and into EMIS in Nauru. Other countries collected this information in each respective sector/unit in individual personnel files; staff meeting minutes books; and in annual work or school plans. FSM indicated that they had a professional development coordinator who collected these data.

In response to how these data about professional development were used in the different countries, a number of methods emerged. Almost all of the countries were using the data to ensure that they were preparing staff to meet the needs of learners, to identify what future professional

| Table 2. Type of information collected on professional development activities by country						
Country	PD		Type of PD		PD on IE	
	Teachers	Principals	Teachers	Principals	Teachers	Principals
Cook Islands	✓	✓	✓	✓	✓	✓
Fiji	✓	✓	✓	✓	✓	X
FSM	✓	✓	✓	✓	✓	✓
Kiribati	X	X	X	X	X	X
Nauru	✓	✓	✓	✓	✓	✓
Niue*	✓	✓	✓	✓	X	X
Palau	✓	✓	✓	✓	✓	✓
PNG	✓	✓	✓	✓	✓	✓
RMI	✓	✓	✓	✓	✓	✓
Samoa	✓	✓	✓	✓	✓	✓
Solomon Islands	✓	✓	–	–	X	X
Tonga	✓	✓	✓	✓	✓	✓
Tuvalu	✓	✓	✓	✓	✓	✓
Vanuatu	✓	✓	✓	✓	✓	✓

Notes: With the exception of Kiribati all respondents report that they are collecting data in most of these areas. The main providers of professional development are presented in Figure 2.

FSM: Federated States of Micronesia; PNG: Papua New Guinea; RMI: Republic of Marshall Islands.

*Niue only has 2 schools; X = Not collected; – = missing data.

Figure 1. Other relevant information collected about students with disabilities in the Pacific islands.
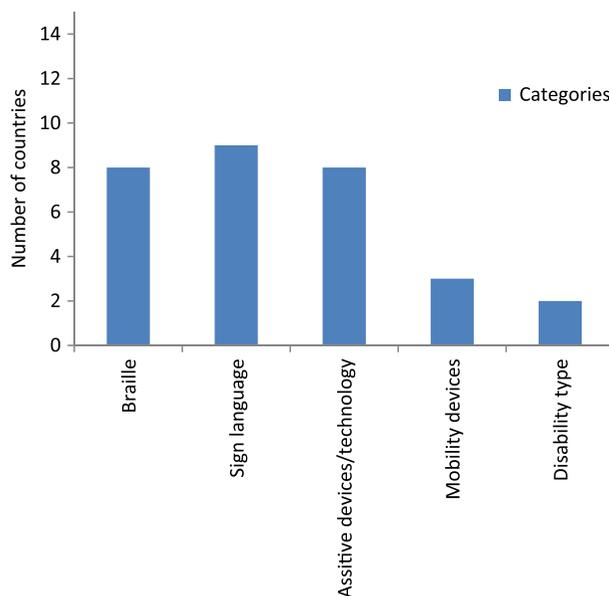
development was needed, to identify the strength of teachers and areas that they need support in, and/or to plan for workshops and training. Some countries such as RMI needed to use these data to meet federal funding requirements or to report to government as in the case of Vanuatu. FSM also used this information to justify promotion or staff salary increases and access to other related benefits. In Fiji and PNG, it is also used for renewal of contract/promotion and/or teacher registration purpose.

cogent •• education

Figure 2. The main providers of professional development in inclusive (or special) education for teachers and school leaders in the Pacific islands.
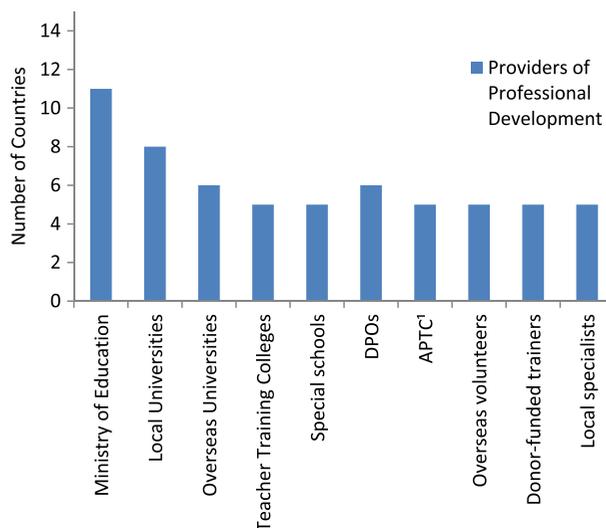
3.3. Information collected about policy

The third set of questions sought data on whether countries had an inclusive education policy and if so, what indicators they currently used to collect information about its implementation. Information was further requested on any existing practices of special schools that were supporting disability-inclusion or what future role they could play.

3.3.1. Inclusive education policy

In response to whether countries had inclusive education policies information provided would seem to indicate that participants believed that these did exist but that they were in reality embedded within other policies. The exceptions to this were the Cook Islands (Cook Islands Ministry of Education, 2010); Fiji (Fiji Ministry of Education, 2013); Niue (Niue Department of Education, 2012); and Vanuatu (*The Department of Education's Inclusive Education Policy and Strategic Plan of 2010–2020, 2010*), who all had recently developed policy focusing specifically on inclusive education. Other countries indicated that inclusive education was rooted within national education strategic plans (e.g. Kiribati, Nauru) or special education policies (e.g. FSM, Palau, PNG) (see also Forlin et al., 2015, for a detailed overview of all policies related to special and inclusive education in the Pacific islands).

All countries appeared to be at different stages of adopting these policies. For example, Samoa launched its national policy, *Samoan National Policy for Persons with Disabilities*, in 2011. Solomon Islands developed the *Solomon Islands National Policy on Disability and Program of Action* in 2005. Fiji developed their *National Policy on Persons with Disability* in 2008. Other than the data that were being collected in some countries about children with disabilities (see Section 3.1), there was no indication that any data were being specifically collected about the implementation of inclusive education.
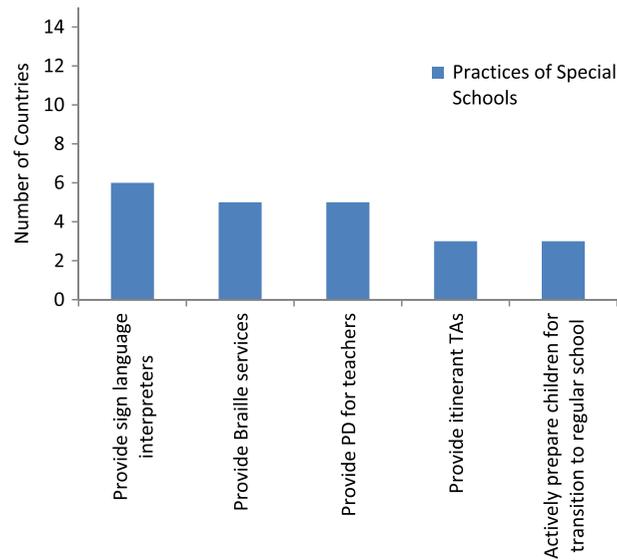
3.3.2. Special schools

3.3.2.1. Existing practices of special schools: Existing practices of special schools that are supporting the inclusion of children with disabilities in regular schools are presented in Figure 3. In FSM there are no special schools, only public or private schools. In addition, Samoa provides support to regular schools for early detection and diagnosis and offers parent empowerment groups. Their special schools also provide vocational training, therapy, wheelchair servicing, and special education support. Fiji is in the process of transferring some of the special education teachers into mainstream schools.

A number of proposed additional roles that special schools could perform were suggested by nine countries. These included:

Figure 3. Existing practices of special schools that are supporting the inclusion of children with disabilities in regular schools in the Pacific islands.

Notes: There are no special schools in the Republic of Palau. No information was received from the Cook Islands, Nauru, Niue, Tuvalu, or the Solomon Islands for these questions.

- providing support for training special teachers to serve in regular schools that accommodate special children;
- developing satellite (outreach classes) where the special school is responsible for teacher + resources in mainstream schools;
- sharing specialists with regular schools
- provide remedial or get ready for mainstream school services for students with special needs who can cope with regular instructions in regular schools with some assistance
- train staff on process of inclusive educational change
- provide in-service training on special/inclusive education to regular schoolteachers;
- assist teaching institutions in providing tutorials on various areas of special/inclusive education when requested;
- increase collaboration between special and regular schools;
- organize for students on braille or sign language interpretation for deaf students sitting for exams;
- organize forums for inclusive education advocacy; and
- provide consultation on the policy.

3.4. Information reporting

The final section sought to identify who schools and regions currently needed to report education information to and the indicators they reported against for each of these stakeholders. Substantial information was provided for six countries (Fiji, Kiribati, Samoa, Vanuatu, Niue, Solomon Islands) with limited information available for the remaining countries. For these six countries, they proposed that they were required to report to their country Ministry of Education and donor agencies and development partners, such as AusAID (*sic*), European Union, UNICEF, and the World Bank.

Reporting involved collating a variety of information including enrolments, attendance, retention, completions, the number of children with disabilities in school, programmes offered, and in some countries reporting was required on policy development and their implementation framework for inclusive education. Most of these countries also indicated that they needed to report against the Pacific Regional Strategy on Disability, Education for All, and for some the Convention on the Rights of Persons with Disabilities. There was no consistency across the 14 countries, though, with

requirements for reporting appearing to vary between and within countries, depending on the authority to which they needed to submit the information.

The Federated States of Micronesia and Tonga indicated that they reported to the Ministry of Education but no details were available. Tuvalu and PNG survey responses indicated that they reported to all groups except donor agencies. No information was available for the Cook Islands or for RMI.

4. Discussion

This paper reports the results of data sought from 14 Pacific island countries to ascertain existing measures being used to monitor and evaluate education. A key purpose was to gain an understanding of indicators and data that Pacific countries are currently using to monitor and evaluate education in general that could be disaggregated to specifically monitor the inclusion of children with disabilities. This information has been used to ground the development of a set of disability-inclusive education indicators to be applied across these countries. Participants for this study were officials from various ministries in the Pacific and thus were either directly responsible for collecting data about students with disabilities or providing such data to other ministries.

The data gathered from the participants indicated that there were wide variations in terms of educational information collected across the Pacific countries. Most of the 14 countries had a national literacy and numeracy test generally held in the fourth and sixth years of primary school. Few countries held national literacy or numeracy tests in secondary schools. Only two countries disaggregated these data according to disability. One good practice highlighted in the study was that all of the 14 Pacific countries were collecting data on student enrolments.

A number of the Pacific countries have been collecting data about students with disability using qualitative measures. These included data in the form of school improvement plans, individual learning plans, classroom- and school-based assessments, child assessment profiles and observations. One area that seems to have received limited attention across the Pacific countries is the measuring of outcomes of students with disability. None of the participants reported use of any structured data collection system at district or national level for students with disability that captured information about attendance, retention, achievement or participation. These high-level directions would seem to be a good starting point for the development of high-level regional indicators.

Ongoing regional EMIS strengthening programmes being undertaken by the Secretariat of the Pacific Community (Australian Government AusAID, 2012a) and UNESCO Institute for Statistics are working to improve EMIS functioning as well as quality and use of data. A separate study within the larger research project that is the subject of this paper is being undertaken currently to validate a means of disaggregating the Fiji EMIS by disability (Sprunt, 2014). Early findings have been used to inform decisions by the regional EMIS strengthening programme about options for a consistent approach to disability disaggregation of Pacific EMISs.

At this stage, it is important to highlight the critical role played by the PIFS in this regard. PIFS drafted the PEDF 2009–2015 (Pacific Islands Forum Secretariat, 2009b) that considers inclusive education a priority in this region. PIFS also identified three key challenges for the Pacific countries with regard to providing education to children with disability that relate to access, quality and policy, and institutional framework. The challenge of access relates directly to the issues discussed above. PIFS has highlighted the need for countries to collect data on children with disabilities through modifying existing EMIS systems to enable disability disaggregated data.

As many countries utilize special schools to assist them in supporting the move towards inclusive education, participants were asked to respond about what role these were currently playing in the Pacific island countries. A further question asked participants to describe how special schools across the Pacific could support the implementation of disability-inclusive education as the intention of

governments is to retain the special schools at this stage. It is important to note that whilst not all countries have special schools (e.g. FSM and Vanuatu), and indeed many of the countries have such small populations that such schools would not be viable or warranted, participants did identify a range of ways special schools could further support disability-inclusive practices. These included training regular school teachers, establishing outreach classes in regular schools, sharing specialists with regular schools, increasing school collaboration, and preparing students to transition from special to regular schools. It was also suggested that special schools could train staff and provide in-servicing on special and inclusive education, assist teaching institutions by providing specialist tutorials, organize forums on inclusive education, and provide consultation on the development of country disability-inclusive policies.

This recommendation for improved training of teachers is in line with both research from the European Agency Development Special Needs Education (Meijer, 2010), Florian (2009) and policy guidelines by UNESCO (1994), that posit that without the availability of well-prepared educators, implementation of inclusive education policies are unlikely to be successful. A range of skills that inclusive teachers need have been identified focusing not only on the theoretical aspects of inclusive education (what and why) but that they should also be competent in using inclusive practices (the how of inclusion). These skills support best practices recognized in teacher education for inclusive education (Meijer, 2010) and if adopted are likely to result in a greatly improved teaching force across the Pacific. This would, however, require a significant shift in the way teachers are currently being prepared across the Pacific countries (Hiebert, Morris, Berk, & Jansen, 2007).

It may be useful to recap that the outcomes of the current study were used in developing key items that could form part of a much advanced tool to develop disability-inclusive education indicators for the Pacific countries. The current survey study allowed us to identify some of the key indicators that subsequently formed the Pacific Indicators for Disability Inclusive Education (Pacific-INDIE) tool (Sharma et al., 2016). The Pacific-INDIE consists of 48 indicators that are distributed across 10 key dimensions. An example of an indicator under the dimension of "Policy and Legislation" is worded as "Existence of legislation and/or policy that clearly articulates right to appropriate education for all children and youth with disabilities".

It is important to also acknowledge a significant limitation of the research. We made efforts to collect data from a number of Ministries in each of the 14 Pacific countries. We also sent several reminders to non-respondents. Despite our best efforts we only received limited responses. Respondents for only 6 of the 14 countries indicated that enrolment data were disaggregated by disability, however, a review of the EMISs in the 14 countries (Sprunt, Sharma, & Marella, n.d.) showed that enrolment data are in fact disaggregated by disability in 13 countries. This may indicate a limited awareness of the disability-related details of the EMIS by the officers who were responsible for completing this survey. Given the increasing imperative for improving access to quality education for children with disabilities and for measuring processes and outcomes (United Nations, & World Education Forum, 2015), officers responsible for the implementation of inclusive and/or special education policies will need to use and advocate for wider use of, disability data available within their national EMIS.

It is, therefore, important to be careful in making judgement about the country programmes based on the information presented in this paper. Research on perspectives of key government representatives about inclusive education is limited internationally and almost non-existent in the Pacific. This is an area that will require considerably more work if judgements made are to be based on reliable data.

A further constraint is that we have endeavoured to provide an overview of 14 Pacific island countries, which brings the risk of making generalizations. It is clear from the data that the mandates about educating children with disabilities vary considerably between the countries and that they all have somewhat different attitudes and priorities when considering disability-inclusive education.

This is compounded by the Islands' affiliations with a range of different international countries such as New Zealand, Australia, US and France which impose different laws and regulations in respect of educating children with disabilities. We acknowledge, thus, that it is somewhat artificial to present a generalization of disability-inclusive education in the region. Nevertheless, as all countries are committed to implementing the PEDF, which was developed by the PIFS—a body representing the Pacific island governments—it is important to be able to identify commonalities among them so that a set of indicators for measuring progress towards realizing this Framework can be developed.

Despite long-standing commitment by Pacific island governments to disability-inclusive education and commitments to improve measurement of education outcomes generally and outcomes related to children with disabilities specifically (Pacific Islands Forum Secretariat, 2009b), there are distinct difficulties in achieving meaningful measurement of indicators of disability-inclusive education. EMISs across the region have historically been challenged by slow turnaround in schools submitting data, lengthy time for data being analysed and disseminated, and then limited use of data by policy and programme officers and by schools (Australian Government AusAID, 2012b). As countries have moved to increase the use of electronic rather than paper-based EMIS census forms, this has improved efficiency in many ways and reduced Ministry of Education data entry delays. Nonetheless, this has brought with it the challenges of limited access to electricity and internet by schools in more remote areas. In addition to the exercise of improving the quality, timeliness and use of data within the EMISs, building measures of disability into EMISs brings a distinct layer of complexity.

Disability is viewed and defined differently not only across countries, but within countries. In settings which may not have ready access to diagnosis and specialists, or which are not geared for schools to consistently and reliably identify disabilities, children may be categorized quite differently or not identified as having a disability depending on someone's experience, training and personal opinions. A diagnosis may not be inherently useful where there is no specific response available to help, and the authors acknowledge the risks in seeking a 'category' for a child. However, this raises the intrinsic predicament of the measurement of disability-inclusive education – if we are to 'count' children with disabilities as a means of determining increasing access to quality education for children, then we must identify a feasible, reliable and valid means of identifying who are the children with disabilities. In addition, the approach would need to be responsive to national policy and legislative definitions of disability whilst enabling comparison across Pacific islands.

In addition to the complexities of determination of disability categories for the EMIS, reform towards disability-inclusive education requires measurement of other factors such as accessibility of built environments and transport systems, attitudes and practices of teachers, provision and effectiveness of reasonable accommodations for learning and assessment, to name a few. In Pacific education systems which are already overstretched and where government officers frequently wear multiple hats (Sprunt, 2014), the burden of collection, analysis and use of data for the (often sole) special/inclusive education officer responsible for the whole country can be overwhelming. The process of selecting indicators to measure disability-inclusive education reform is critical. It must ensure that time is spent gathering data on issues that are most pressing and which will inform policy and budgetary decisions most usefully. In the context of EMISs which are rapidly evolving due to increasing technology, capacity and government attention to the issue, there are distinct opportunities to embed disability into the EMISs that will enable effective policy decisions rather than further add to the 'burden of data'.

5. Conclusion

It is widely recognized that successful implementation of educational reforms requires that attention is paid to the context. It is also well documented that inclusion is unlikely to occur in settings where there is not enough support (Ahmmed, Sharma, & Deppeler, 2014; Brownell & Pajares, 1999; UNESCO, 1994). This research forms part of a larger project on the development of a set of disability-inclusive indicators for the Pacific islands (Forlin et al., 2015) where we are making conscious efforts

to ensure that the philosophies of "context is critical" and "support is available" guide this. Data collected from the various Ministries provide a snapshot of the current status regarding information that is already collected in the different countries for education that could be disaggregated to identify the inclusion of children with disabilities. These key findings have assisted us to work collaboratively with the PIFS and local stakeholders to draft a set of contextually appropriate disability-inclusive indicators. We hope this work will be useful for other regions embarking on developing similar indicators.

Author details

Umesh Sharma[1]
E-mail: Umesh.sharma@monash.edu
Chris Forlin[2]
E-mail: chrisforlin@outlook.com
Beth Sprunt[3]
E-mail: b.sprunt@unimelb.edu.au
Laisiasa Merumeru[4]
E-mail: laisiasam@forumsec.org
ORCID ID: http://orcid.org/0000-0001-8560-3924

[1] Faculty of Education, Krongold Centre, Monash University, Wellington Road, Victoria 3800, Australia.
[2] Bayswater, Western Australia 6053, Australia.
[3] Nossal Institute for Global Health, The University of Melbourne, Level 4, Alan Gilbert Building, 161 Barry St., Carlton, Victoria 3010, Australia.
[4] Pacific Islands Forum Secretariat, Nadi, Fiji.

References

Ahmmed, M., Sharma, U., & Deppeler, J. (2014). Variables affecting teachers' intentions to include students with disabilities in regular primary schools in Bangladesh. *Disability & Society, 29*, 317–331. doi:10.1080/09687599.2013.796878

Ainscow, M., Dyson, A., Booth, T., & Farrell, P. (2006). *Improving schools, developing inclusion*. Abingdon: Routledge.

Australian Government AusAID. (2012a). *Investment design for strengthening education management information systems (EMIS) in the Pacific*. Canberra: Author.

Australian Government AusAID. (2012b). *Pacific education management information systems – Rapid review*. Canberra. Retrieved from www.ausaid.gov.au

Australian Government Department of Foreign Affairs and Trade. (n.d.). *Disability-inclusive development*. Retrieved from http://aid.dfat.gov.au/aidissues/did/Pages/home.aspx

Booth, T., & Ainscow, M. (2002). *Index for inclusion: Developing learning and participation in schools*. London: Centre for Studies in Inclusive Education.

Brownell, M. T., & Pajares, F. (1999). Teacher efficacy and perceived success in mainstreaming students with learning and behavior problems. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 22*, 154–164. 10.1177/088840649902200303

Cook Islands Ministry of Education. (2010). *Towards an inclusive society—The Cook Islands inclusive education policy, 2010*. Avarua: Author.

Fiji Ministry of Education. (2013). *Policy in effective implementation of special and inclusive education in Fiji*. Suva: Author.

Florian, L. (2009). Preparing teachers to work in 'schools for all'. *Teaching and Teacher Education, 25*, 533–534. 10.1016/j.tate.2009.02.004

Forlin, C. (2013). Changing paradigms and future directions for implementing inclusive education in developing countries. *Asian Journal of Inclusive Education, 1*, 19–32.

Forlin, C., Sharma, U., Loreman, T., & Sprunt, B. (2015). Developing disability-inclusive indicators in the Pacific Islands. *Prospects, 45*, 197–211. doi: 10.1007/s11125-015-9345-2

Frederickson, N., & Cline, A. (2009). *Special educational needs, inclusion and diversity*. New York, NY: Open University Press.

Government of Fiji Ministry of Education, National Heritage, Culture and Arts. (2008). *Education for all mid-decade assessment report*. Nadi: UNESCO.

Government of Samoa Ministry for Education, Sports and Culture. (2007). *Education for all: mid-decade assessment report*. Apia: Author.

Hiebert, J., Morris, A. K., Berk, D., & Jansen, A. (2007). Preparing teachers to learn from teaching. *Journal of Teacher Education, 58*, 47–61. doi:10.1177/0022487106295726

Individuals with Disabilities Education Improvement [IDEA] Act (2004). (2001). *No Child Left Behind [NCLB]*. US Government Department of Education.

Jorgensen, C. M., & Lambert, L. (2012). Inclusion means more than just being "in:" planning full participation of students with intellectual and other developmental disabilities in the general education classroom. *International Journal of Whole Schooling, 8*, 21–36.

Lalvani, P. (2013). Privilege, compromise, or social justice: Teachers' conceptualizations of inclusive education. *Disability & Society, 28*, 14–27. doi:10.1080/09687599.2012.692028

Le Fanu, G., & Kelep-Malpo, K. (2015). Papua New Guinea: Inclusive education. In M. Crossley, G. Hancock, & T. Sprague (Eds.), *Education in Australia, New Zealand and the Pacific* (pp. 219–242). London: Bloomsbury Academic.

Lupart, J., & Webber, C. (2012). Canadian schools in transition: Moving from dual education systems to inclusive schools. *Exceptionality Education International, 22*, 8–37.

McDonald, L., & Tufue-Dolgoy, R. (2013). Moving forwards, sideways or backwards? Inclusive education in Samoa. *International Journal of Disability, Development and Education, 60*, 270–284.

Meijer, C. J. W. (2010). Special needs education in Europe: Inclusive policies and practices. *Zeitschrift für Inklusion,* [S.l.], ISSN 1862-5088. Verfügbar unter. Retrieved January 08, 2016, from http://www.inklusion-online.net/index. php/inklusion-online/article/view/136

Merumeru, L. (2006). *Inclusive education and teacher education in Fiji: The case of Lautoka teachers college* (Unpublished Masters dissertation). London: Institute of Education.

Miles, S., Lene, D., & Merumeru, L. (2014). Making sense of inclusive education in the Pacific region: Networking as a way forward. *Childhood, 21*, 339–353. doi:10.1177/0907568214524458

Niue Department of Education. (2012). *Niue department of education inclusive education policy 2012*. Alofi: Author.

Pacific Board for Educational Assessment, Secretariat. (2013). Pacific benchmarking for education results (PaBER). Retrieved from http://www.spbea.org. fj/getattachment/218361b5–7afa–42a4–89f8– 8c9dcb43a502/PaBER–Bulletin–1.aspx

Pacific Islands Forum Secretariat. (2009a). *Forum disability ministers' meeting: Session two report on the review of the forum basic education action plan & associated regional processes*. Retrieved from http://www.forumsec.org/ resources/uploads/attachments/documents/FEDMM%20 09%20FBEAP%20Review.pdf

Pacific Islands Forum Secretariat. (2009b). *Pacific education development framework 2009-2015 (PEDF)*. Suva: Author. Retrieved February 9, 2011 from http://www. forumsec.org.fj/resources/uploads/attachments/ documents/Pacific%20Education%20Development%20 Framework%202009-2015.pdf

Pacific Plan Review Note 6. (2013). Measuring progress. Retrieved from http://pacificplanreview.org/resources/ uploads/attachments/documents/Review_Note6_ Measuring_Progress.pdf

Puamau, P. (2007). Advancing inclusive education in the Pacific. In P. Puamau & F. Pene (Eds.), *Inclusive education in the Pacific (Pacific education series, 6)* (pp. 9–28). Suva: Institute of Education, University of the South Pacific.

Scaglion, R. (2015). History, culture and indigenous education in the Pacific Islands. In W. J. Jacob, S. Y. Cheng, & M. K.

Porter (Eds.), *Indigenous education: Language, culture and identity* (pp. 281–299). Dordrecht: Springer.

Sharma, L., Loreman, T., & Macanawai, S. (2015). Factors contributing to the implementation of inclusive education in Pacific Island countries. *International Journal of Inclusive Education*. doi:10.1080/13603116.2 015.1081636

Sharma, U., Forlin, C., Marella, M., Sprunt, B., & Deppeler, J. (2016). *Pacific indicators for disability-inclusive education (Pacific-INDIE) guidelines*. Melbourne: Author.

Sprunt, B. (2014). *Efforts to improve disability disaggregation of the Fiji education management information system*. Melbourne: Nossal Institute for Global Health. The University of Melbourne. Retrieved from www.un.org/ disabilities/documents/egm2014/Ms.Sprunt.docx

Sprunt, B., Sharma, U., & Marella, M. (n.d.). *Disability disaggregation of educational management information systems (EMIS) in the Pacific—A review of system capacity*. Melbourne: Author.

Thaman, K. H. (2015). Pacific Island countries: An overview. In M. Crossley, G. Hancock, & T. Sprague (Eds.), *Education in Australia, New Zealand and the Pacific* (pp. 91–110). London: Bloomsbury Academic.

UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific). (2012). *Incheon strategy to "make the right real" for persons with disabilities in Asia and the Pacific*. Bangkok: United Nations Publications.

UNESCO. (1994). *Salamanca statement*. Paris: Author.

UNESCO. (2004). *Embracing diversity: Toolkit for creating inclusive, learning-friendly environments*. Bangkok: United Nations Educational, Scientific and Cultural Organization.

UNESCO (2005). *Guidelines for inclusion: Ensuring access to education for all*. Paris: UNESCO.

United Nations. (2007). *Convention on the rights of persons with disabilities*. Retrieved from http://www.un.org/ disabilities/convention/conventionfull.shtml

United Nations. (2012). *The millennium development goals*. New York, NY: Author.

United Nations, & World Education Forum. (2015). *Incheon declaration. education 2030: Towards inclusive and equitable quality education and lifelong learning for all* (ED/WEF2015/ MD/3). Paris: UNESCO. Retrieved from http:// www.uis.unesco.org/Education/Documents/ education_2030_incheon_declaration_en.pdf