

Evaluation of New Zealand Aid Programme support to the Curriculum Development Division of the Ministry of Education & Human Resources Development (Solomon Islands)

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### **Abstract**

This evaluation of the support provided to the Curriculum Development Division (CDD) is intended to inform future funding decisions to assist the CDD. It assesses how effectively and efficiently the support has delivered on its expected achievements, and how relevant the support is to improve access to, and the quality of, basic education in Solomon Islands. The evaluation was informed by a literature review, a review of project management documentation, observations of classrooms, and informant interviews with key stakeholders. The support provided by the Technical Advisers was used by the Director and some staff in the CDD, contributing to the development of the 32 contracted materials as well as an additional 8 curriculum materials. However, the provision of support presented on-going challenges for both the CDD and UniQuest. The support provided cost-effective assistance by using shortterm advisors, allowing for a range of expertise across subject areas from 2010 to 2014, and the implemented processes were somewhat inefficient. The materials reflect the overall effectiveness of the support, and contain a range of activities and content necessary for students to achieve the intended learning outcomes. The materials are also relevant and useful; they encourage teachers to align practice to learner-focused and outcomes-based education. However, teachers would require necessary content, theoretical and pedagogical knowledge to be effective teachers and use the materials to their fullest extent. The evaluation recommends that the Ministry of Foreign Affairs and Trade (MFAT) modify the support provided to the CDD, and with the help of CDD, identify the support that has the greatest likelihood to improve access to quality education in Solomon Islands. The evaluation also recommends that MFAT identify and ensure that any arrangements encourage an efficient delivery, and effective and sustainable results as a condition of funding.

### 1. Executive Summary

#### 1.1 Background

Solomon Islands government has engaged in a reform process to improve the quality and relevance of basic education. The New Zealand Aid Programme (Aid Programme), managed by the Ministry of Foreign Affairs and Trade (MFAT), contributes to this reform by providing assistance to the Curriculum Development Division (CDD) in order to improve learning outcomes in Solomon Islands. Specifically, the Aid Programme has provided technical assistance to design and write new curricula and accompanying materials through UniQuest Pty Ltd. Through other funds directed to the Ministry of Education and Human Resource Development (MEHRD) to assist the education sector (the sector budget), the Aid Programme also indirectly supports the editing and publication of curriculum documents and accompanying materials contracted from Pearson by MEHRD.

#### 1.2 Purpose, objectives and methods of the evaluation

The purpose of this evaluation is to provide independent advice to inform MFAT's future funding decision to assist the CDD. A summative evaluation was chosen, since the Aid Programme support to the CDD through UniQuest is now completed and it is timely to determine future relevance.

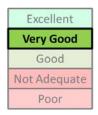
The objectives of the evaluation are to assess the effectiveness and efficiency of the support in improving access to, and the quality of, basic education in Solomon Islands; and the relevance of the support in light of the Solomon Islands context. In doing so, the evaluation considers the outputs and outcomes of the support in light of expected achievements.

The evaluation was informed by 21 documents, a review of 14 curriculum materials, 5 classroom observations in four schools, and 24 individual or small group interviews with school leaders and teachers in the Solomon Islands, staff at the MEHRD, the CDD, UniQuest, and the New Zealand High Commission. These evidence were assessed against an agreed set of quality standards.

#### 1.3 Findings and conclusions

#### Relevant

The support was directly relevant to both the New Zealand and Solomon Islands government. The produced materials aligned with the Solomon Islands National Curriculum Statement, and the overall support was found to assist with the development of quality teaching and learning materials that ultimately improve access to, and the quality of, basic education in Solomon Islands. Overall, the evidence was consistent, with a few exceptions.



#### The materials:

- adequately helped teachers, building on prior learning and toward future learning;
- provided content relevant to the Solomon Islands, including indigenous culture, traditions, and practices;
- provided a range of learning opportunities to meet the needs of all learners (diverse in terms of skills, culture, and motivations), including those who do not continue beyond basic education;
- provided activities and content necessary for students to achieve the intended learning outcomes;
- presented accurate, coherent and mostly well organised content; and
- aligned well in terms of learning outcomes, content and teaching and learning activities between the teacher and learner books.

#### **Effective**

It was also important that the support was effective; in particular, that the support delivered on the expected outputs and outcomes outlined in contracts. The collective evidence suggests that the support was effective overall, albeit with mixed results regarding the effectiveness of output delivery, capability development, and assistance to teachers and learners in the Solomon Islands.



#### The Technical Adviser support:

- was utilised by the Director and some staff in the CDD;
- was used by the CDD to edit the English grammar and proofread the content of classroom resources, refining to ensure the content aligns with the learning outcomes and the activities are achievable for students at the specified year levels; and
- presented on-going challenges for both the CDD and UniQuest.

#### For students, the materials:

- included a range of activities which are effective for student learning;
- offered many learning opportunities to meet the needs of students within the Solomon Islands;

- included engaging and informative content;
- provided colour, glossy pictures that attract students and reflect the peoples and regions of the Solomon Islands; and
- were provided in limited supply, limiting learning opportunities inside and outside the class.

#### For teachers, the materials:

- prompted an active, problem-solving approach to implementing the curriculum;
- set a clear purpose for learning;
- aligned with some evidence about good assessment practice;
- helped teachers to understand the new pedagogy but did not provide enough pedagogical and content knowledge to help teachers to take a problems posing approach;
- assisted with the achievement of many indicators, including improved teacher confidence; and
- were used in the existing instructional mode (e.g. lessons tended to be teacher-dominated rather than studentcentred).

#### **Efficient**

The support was efficient insofar as it used short-term Technical Advisers to provide expertise across a range of subject areas. The allocation of resources was suitable to deliver quality materials while developing local capabilities, achieving good value for money. Nonetheless the support experienced a number of delays and inefficiencies. The evidence was mixed, showing both positive and negative results.



#### The support:

- assisted in the development of the agreed (contracted) 32
  materials, but many of these experienced delays throughout
  the delivery period due primarily to the iterative process
  which included multiple individuals;
- implemented processes necessary to achieve quality materials, resulting in some, albeit few, inefficiencies in delivery process (e.g. editing);
- provided cost-effective support through utilising short term advisors, allowing for a range of expertise across subject areas from 2010 to 2014;
- was not utilised consistently well, with some Technical Advisers unable to deliver while in-country /available; and
- although experienced delays and set-backs, the refocus of efforts towards finalising outputs ensured the materials were completed.

#### 1.4 Recommendations

Overall, the support achieved many of the intended outputs and outcomes. It provided relevant support in light of the Solomon Islands context, effectively providing assistance to the CDD in a cost-effective way. However, continued support remains relevant to the New Zealand Aid Programme priorities and Solomon Island Government/MEHRD needs.

The evaluation recommends:

- 1. MFAT modify support provided to the CDD, and that any future funding arrangements encourage an efficient delivery, and effective and sustainable results as a condition of funding;
- 2. both organisations identify and agree on the most appropriate support that will enable access to quality education in the Solomon Islands with the greatest effect; and
- 3. MEHRD/CDD develop clear processes and procedures to enable efficient and effective use of any future support.

The recommended actions would reinforce the overall direction of the Solomon Islands education system and improve access to quality education. These recommendations are outlined according to the necessary implementation steps, and further unpacked according to future support options, in Chapter 6.

### 2. Background

This chapter provides contextual information about the Curriculum Development Division (CDD) of the Solomon Islands Ministry of Education and Human Resources Development (MEHRD), and the support provided under the contract with UniQuest. It also includes the purpose of the current evaluation of the Activity, its associated methodology, and an overview of the structure of this report.

#### 2.1 Evaluation Purpose

The purpose is to inform decisions about the continuation or modification of future support to the CDD.

The purpose of this evaluation is to inform decision-making aimed at continuation or selection/modification of the support to the CDD. For this purpose, this report:

- answers the key questions from the terms of reference, summarising the evidence to endorse the evaluative statements in the findings section;
- comments on the merit and value of these achievements against the criteria in the conclusions section;
- identifies good practice and practice that would best change in the lessons learned section; and
- provides recommendations regarding potential modifications or conditions to any future support in the dedicated final section.

More widely, this report provides accountability and lessons to the New Zealand Ministry of Foreign Affairs and Trade (MFAT) and MEHRD regarding the resources invested in the support.

#### 2.2 Context

CDD develops materials and coordinates training programmes to enable teachers to implement the new curriculum.

New Zealand's commitments to the Education for All Education Sector Framework and the Millennium Development Goals have guided the New Zealand Aid programme (Aid Programme) to focus on improving access to, and the quality of, basic education in Solomon Islands. Within the Solomons, the reform of the Solomon Islands curriculum and publication of accompanying materials has been undertaken to improve the quality and relevance of basic education. This reform takes place within an environment that has increasingly focused on the effective teaching of literacy and numeracy and the need for materials and teacher resources to contribute to improved learning outcomes. The Solomon Islands Education Strategic Framework 2009–2015<sup>1</sup> confirms the government's investment in people through education

<sup>&</sup>lt;sup>1</sup> Government of Solomon Islands. (2007a) Education Strategic Framework 2007–2015. http://www.paddle.usp.ac.fi/collect/paddle/index/assoc/sol031.dir/doc.pdf

and skills development as one of its key focus areas.

The CDD, a division of MEHRD, leads the Solomon Islands Curriculum Reform Programme, which began in 2005. The aim of this Programme is to increase the quality of primary, secondary, and technical/vocational education. The new national curriculum is central to the reform. It is focused on the creation of an outcomes-based and learner-focused school system that is culturally relevant and appropriate to Solomon Islands.

The CDD began the second phase of the Curriculum Reform Programme in 2010. Its priority tasks are the development and provision of curriculum materials to enable teachers to implement the new curriculum in all schools that offer primary and junior secondary education. The materials consist primarily of learner books and teacher guides. The CDD is endeavouring to accompany their provision with teacher training programmes.

The New
Zealand Aid
Programme
contributes to
this process.

Since 2010, the Aid Programme has provided support to the CDD (the support) to help improve learning outcomes in Solomon Islands. Specifically, the Aid Programme has provided technical assistance to design and write the new curricula and accompanying materials through UniQuest Pty Ltd, which was then subcontracted to the University of Queensland in the final stages of the work (May 2014). Lead consultants and Technical Advisers provided advice and support to assist the CDD Director and Curriculum Development Officers strengthen and assist with all aspects of the development, writing, and publication processes in each subject area. To a lesser extent, the advisers also provided assistance and advice with the delivery of related in-service training.

Through the sector budget (i.e. apart from the UniQuest contract), the Aid Programme also indirectly supports the editing and publication of curriculum documents and accompanying materials contracted from Pearson by MEHRD. The curriculum materials are managed by CDD, who are responsible for sending the materials to Pearson and for signing off the final materials produced by this contractor. The materials are then distributed to schools through MEHRD's Education Resource Unit (ERU). The Aid programme does not have any contract with Pearson but rather assists with this process indirectly through financial support to MEHRD.

The Curriculum Reform Programme continues to be a crucial element of the Strategic Plans for Education. The Solomon Islands Government (SIG) National Education Action Plan (NEAP) 2013–2015<sup>2</sup> includes the development of primary and junior secondary curriculum resources and related teacher training programmes and materials. MEHRD has confirmed that providing TAs for the CDD continues to be a Ministry

<sup>&</sup>lt;sup>2</sup> Government of Solomon Islands. (2007b). *National Education Action Plan 2007–2009*. Author: Honiara.

priority because the objectives of the Curriculum Reform Programme require high-quality resources for learners, teachers and the trainers of teachers.

#### 2.3 Scope

The evaluation focused on the support provided to CDD, and associated activities and outcomes

The evaluation The evaluation focused on the Aid Programme support to the CDD of focused on the MEHRD from 2009 to the present day<sup>3</sup>, focusing on answering the evaluation questions listed above. As a result, the following were provided to included as aspects of the evaluation (in scope):

- the process of developing the curriculum materials (e.g., teacher guides and learner books);
- the technical assistance provided by UniQuest staff to CDD;
- the engagement of other publication companies as part of the current contract and the processes involved, insofar as they affected UniQuest's ability to deliver the contracted work; and
- the process of distributing the curriculum materials.

What was not included in this evaluation are listed below (out of scope):

- any teacher pre- or in-service programmes;
- any curriculum materials produced besides those produced under the contract between MFAT and UniQuest;
- the publishing process or contract with the publishing company;
- review of MEHRD's Education Resource Unit, which distributes the materials to schools;
- Value for Money will not include an analysis of competition prices, comparing UniQuest costs with competitor prices; and
- the School of Education's views are not included in the evaluation.

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<sup>&</sup>lt;sup>3</sup> Some support was being provided although the contract formally finished in June 2014

#### 2.4 Design

The evaluation answers questions about the relevance, effectiveness, and efficiency of the support provided to CDD, using indicators of 'expected' and 'effective' practice.

The evaluation looked to answer a series of questions about the relevance, effectiveness and efficiency of the support provided to CDD (c.f. Appendix 7.2). It does this by judging the support against both "expected" and "effective" practice, derived from contractual documents, published literature, and relevant Solomon Island documents. This information identified explicitly both the desired outcomes of the support (c.f. "what is good") along with performance indicators (c.f. "what does good looks like"). All outcomes and indicators are outlined in Appendix 7.3.

To ensure this evaluation provides accurate and useful findings, a range of methods were to answer MFAT's questions. These included:

- Document review, specifically 5 relevant Solomon Islands documents and 23 project management documents;
- Production and distribution statistics, evidenced in 12 documents;
- Review of curriculum materials, produced with the assistance of technical advisers and representing 35%, or 14 of the 40 materials supported;
- Classroom observations, representing 5 classes delivering different materials of the 40 curriculum materials produced;
- Interviews with school staff (11 individuals), CDD staff (75%, or 3 of the 4 relevant staff), MEHRD staff (3 individuals), UniQuest staff (66%, or 4 of the 6 relevant staff), and New Zealand High Commission staff (3 individuals).

The data collection and analysis methods are summarised in the Appendix 7.3. The evaluation triangulated the evidence, using multiple sources of information and indicators to answer each question (c.f. Appendix 7.4). The evaluation team triangulated data to cross-verify findings and to support valid evaluative judgements.

The information sources did not include members of the subject working group<sup>4</sup>. Reports reflecting the benefits of the support on this group are from other individuals engaged with these groups, and are indicated as such when noted.

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<sup>&</sup>lt;sup>4</sup> The Subject Working Group were not included in the Terms of Reference. As the evaluation team were made aware of this group when in-country data gathering commenced, it was not possible to arrange interviews with these individuals within the time period.

### 3. Findings

This chapter outlines the evidence collated as part of the evaluation, discussing the value of the support throughout the sections.

The Findings section summarises evidence and indicators of effective practice, as well as whether these indicators are exemplary.

Throughout the Findings section, the evaluation team's ratings (if appropriate to the data) are summarised as the proportion of indicators that have achieved success (% Achieved) for each outcome. according Additionally, the data are summarised achievements that were considered exemplary (% Achieved: These summary judgements are presented performance indicator dashboards, shown below.

Table 1: Example performance indicator dashboard

Outcome		% Indicators: Achieved		% Indicators: Exemplary		
2. The resources connect to the progressions indicated in the relevant syllabi.	66%	2 of 3 materials reference relevant learner progressions	0%	0 of these 3 indicators were considered exemplary		

In each performance indicator table, light green highlighted cells indicates that more than half of the source information shows the indicator to be present (% achieved), and dark green indicates more than 75 per cent of source information have the indicator present. Cells in the Exemplary column are not highlighted because they exceed the expected standard (i.e. Achieved).

Overall conclusions and recommendations for each section are provided in red-highlighted boxes, identifying the conclusions and indicating how the Solomon Islands government can further enhance access to quality education.

#### 3.1 Relevance of the support provided to CDD

# 3.1.1. The curriculum materials are appropriate to the NCS and adequately contribute to the achievement of the intended learning outcomes

The Solomon Islands National Curriculum Statement (MEHRD, 2012) reflects a significant shift from a content-driven curriculum to an outcomes-focused curriculum that centres on the learner and that recognises that learning is a lifelong process that occurs in many places. This shift is consistent with international research that recognises the importance of making learning outcomes the "touchstone" of educational improvement. <sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Timperley, H., Wilson, A., Barrar, H., and Fung, I. (2007). Teacher professional learning and development: Best Evidence Synthesis iteration [BES].

The Solomon Islands National Curriculum Statement (NCS) itself sets out eight Key Learning Outcomes (KLOs) for learning across the curriculum, as well as sets of subject outcomes and outcomes for different levels of the curriculum. It explains how each subject syllabus is intended to contribute to the KLOs, while also describing a subject-specific set of General Learning Outcomes (GLO), accompanied by Specific Learning Outcomes that are used to evaluate whether learners have achieved the GLO.

The curriculum materials mostly encourage the achievement of the learning outcomes set out in the NCS and subject syllabi. It does this by aligning the content to the syllabi, helping to encourage the conceptual shift to a learner-focused curriculum, and providing materials for teachers to plan lessons addressing learning outcomes.

Table 2: Performance indicator dashboard: Outcomes 1-4

Outcomes	% Indicators: Achieved		% Indicators: Exemplary	
The curriculum materials encourage the achievement of the key learning outcomes set out in the	100%	8 of 8 users <sup>6</sup> report that curriculum materials are aligned with the intended learning outcomes	88%	7 of the 8 indicators
Solomon Islands National Curriculum Statement (NCS) and the relevant learning outcomes in the syllabi.	100%	7 of 7 materials make explicit reference to, and alignment with, the intended learning outcomes	14%	1 of the 7 indicators
2. The resources connect to the progressions indicated in the relevant syllabi.	29%	2 of 7 materials reference relevant learner progressions and make connections	0%	0 of the 7 indicators
	78%	7 of 9 users report that the curriculum materials support the shift in knowledge, understanding and practice	33%	3 of the 9 indicators
The curriculum materials	75%	3 of 4 users can explain and exemplify the shift from a content-driven curriculum and a teacher transmission model	25%	1 of the 4 indicators
encourage the conceptual shift to an outcomes-based and learner-focused curriculum.	100%	7 of 7 materials highlight and explain the shift from a content-driven curriculum and a teacher transmission model	29%	2 of the 7 indicators
	100%	7 of 7 materials set out strategies and learning activities that encourage learning outcomes and learner focus	14%	1 of the 7 indicators
	100%	7 of 7 materials set out and explain learning outcomes	0%	0 of the 7 indicators

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<sup>&</sup>lt;sup>6</sup> The term "Users" in the performance indicator tables is for ease, referring broadly to school leaders, teachers, PCDOs, MEHRD staff and UniQuest staff.

Outcomes	% Indicators: Achieved		% Indicators: Exemplary	
	67%	2 of 3 classroom observations show lesson outcomes are clearly linked to syllabus/NCS outcomes	33%	1 of the 3 indicators
4. The curriculum materials help teachers to plan lessons with learning outcomes in mind.	100%	7 of 7 materials link lesson outcomes to syllabus/NCS outcomes	0%	0 of the 7 indicators
	100%	7 of 7 materials provide sample lesson plans that are constructed around learning outcomes		n/a

The curriculum materials provide adequate support to plan lessons around learning outcomes.

As shown in Table 2 (outcome 1), the evidence showed consistently that the curriculum materials adequately encourage the achievement of the key learning outcomes set out in the NCS and the relevant learning outcomes in the syllabi. All users reported that the curriculum materials are aligned with the intended learning outcomes, and all materials that were reviewed made reference to and were aligned with the intended learning outcomes. However, as will be discussed, many teachers did not have the teacher guides that contain these supports or if they did, they had not necessarily read the front section and the appendices where the connections are made most clearly.

Although the data show consistent indications of adequate provision within the materials, it would be better if the materials had made explicit to learners that these are the "learning outcomes". Likewise, most of the teacher guides do not make it clear that the learning outcomes should be discussed and learners and teachers should be monitoring them together. Another missed opportunity is that these guides do not suggest that teachers can use this monitoring to reflect upon and adjust their own practice. The connections to the KLOs in the NCS tended to be implicit. They are addressed through the content and activities (for example, Social Studies books clearly address key learning outcomes such as culture promotion, environment, and ethics and good citizenship), but unless teachers are familiar with the NCS, they are not likely to make the connection.

However, the materials did not connect learning progressions.

Table 2 also illustrated (outcome 2) that the resources did not adequately connect to the progressions indicated in the relevant syllabi, with just 2 of 7 materials referencing relevant learner progressions and making connections. Materials could have further discussed what prior learning might have involved in previous years or suggested that they talk to previous teachers and the learners' parents about this. Monitoring is encouraged over a period of time, such as a term, semester, or year, but there doesn't seem to be a suggestion that it would be continued over multiple years, with data collected, analysed, and maintained in some form of school-wide system.

The table above (outcome 3) also shows that the materials encourage the conceptual shift to an outcomes-based and learner-focused curriculum. Most interviews reflected a view that the curriculum The materials support teachers to shift towards learner focused education, and plan lessons with learning outcomes in mind.

materials are learner-centred, allowing activities whereby students can practice and learn, thus moving away from the previous model of teacher-focused delivery of content; that is, "teacher transmission".

However, most reports of this shift provided examples of students doing more activities, or merely using the term "learner focused" rather than explaining what this means and what it looks like. None of the interviewees talked about a shift to learning that is focused on the learner, as intended by the NCS. Along with this, they did not talk about related concepts such as the ideas of lifelong learning, holistic learning, or the problem-solving approach, all of which are intended by the NCS. It does seem that the new materials encourage a shift to where students are more active in their learning and teachers operate more as facilitators. However, without further assistance, it seems unlikely that the relationship between teacher and learner will change to one in which the learner has control of their learning and is in a reciprocal relationship with the teacher.<sup>7</sup>

The data was often consistent, showing that the curriculum materials help teachers to plan lessons with learning outcomes in mind (Table 2 outcome 4). Specifically, all of the materials reviewed link lesson outcomes to the syllabus, as well as providing sample lessons plans around the learning outcomes. However, most classroom observations showed that the learning outcomes were not shared with students and that the lessons were planned around coverage of content, rather than achievement of desirable skills and competencies.

Research in New Zealand and elsewhere shows that when learners are included in the identification and monitoring of the intended learning outcomes, they take ownership of their learning. This process is critical if learners are to gain those foundational lifelong learning skills and, as NCS indicates, help students to become "lifelong learners". It is likely that the new materials will assist with the achievement of the General and Specific Learning Outcomes. However, if the goal is lifelong learning, then it is also likely that more is needed to introduce the concept of outcomes-focused learning to daily classroom life in the Solomon Islands, including making clear the learning outcomes to students, discussing and monitoring these together. It would be important to extend on the materials, showing how teachers can use this monitoring to reflect upon and adjust their own practice.

Bishop, R., & Glynn, T. (1999). Culture counts: changing power relations in education. Palmerston North: Dunmore Press Ltd.

<sup>&</sup>lt;sup>8</sup> Hattie, J. (2012). Visible learning for teachers. New York: Routledge.

## 3.1.2 The material content is relevant to the Solomon Islands needs, but the cost of the materials limits student learning in the class

There are basic publishing principles that need to inform any new materials, but these materials are part of a reform process intended to communicate some deep shifts in the Solomon Islands education system. The literature review discussed the concept of "educative curriculum materials" — curriculum materials that are intended to promote both teacher and student learning. The concept has been developed and refined over the last fifteen years by a range of researchers. 

9 10 11 12 Educative curriculum materials provide the content and activities that users need to engage with new ideas and information and try to make sense of them in relation to what they already know and can do. As well as following those basic principles (for example, regarding clarity of language and layout and the accuracy of content), they incorporate specific features to help teachers notice and consider new ideas in relationship to their students, the context, and the learning purpose.

As shown in the table below, the evaluation found consistent evidence suggesting that the curriculum materials are fit for purpose and relevant to the Solomon Islands context.

Table 3: Performance indicator dashboard: Outcomes 14 - 18

Outcomes		% Indicators: Achieved	% Indicators: Exemplary		
	100%	4 of 4 classroom observations found that the activities are relevant to the Solomon Islands	100%	4 of 4 indicators	
14. The suggested	57%	4 of 7 material (content) takes into account local resources	57%	4 of 7 indicators	
learning activities are achievable and relevant in Solomon Islands classrooms.	86%	6 of 7 materials provide activities which are relevant to the Solomon Islands	71%	5 of 7 indicators	
Islands classrooms.	89%	8 of 9 users believe that the materials incorporate sufficient content and activities that are directly relevant to the Solomon Islands	66%	6 of 9 indicators	

<sup>&</sup>lt;sup>9</sup> Ball, D. and Cohen, D. (Dec., 1996). "Reform by the Book: What Is – or Might Be – the Role of Curriculum Materials in Teacher Learning and Instructional Reform?" *Educational Researcher*, Vol. 25, No. 9, pp. 6–8 + 14.

<sup>10</sup> Schneider, Rebecca M; Krajcik, Joseph (2002). "Supporting Science Teacher Learning: The Role of Educative Curriculum Materials." *Journal of Science Teacher Education* 13 (3): 221–245.

<sup>&</sup>lt;sup>11</sup> Brown, M. & Edelson, D. C. (2003). Teaching as Design: Can We Better Understand the Ways in which Teachers Use Materials so We Can Better Design Materials to Support their Changes in Practice?

<sup>&</sup>lt;sup>12</sup> Davis, E. A. & Krajcik, J. S. (2005). "Designing Educative Curriculum Materials to Promote Teacher Learning". Educational Researcher, 34 (3), 3–14.

Outcomes		% Indicators: Achieved		ndicators: emplary
	100%	7 of 7 users believe that the materials provide the content necessary to enable students' to achieve the intended learning outcomes	71%	5 of 7 indicators
15. The curriculum materials provide the content necessary for students to achieve the intended learning	100%	3 of 3 classroom observations found that the materials provide the content necessary to enable students' to achieve the intended learning outcomes	67%	2 of 3 indicators
outcomes.	100%	3 of 3 classroom observations found that students are able to achieve learning outcomes	67%	2 of 3 indicators
	57%	4 of 7 material content caters for all students, including mixed levels of ability	0%	0 of 7 indicators
16. The learner books and teacher guides are aligned in terms of	80%	4 of 5 users believe it is easy for teachers to navigate between the teacher and student resources and they convey the same essential theories and content	80%	4 of 5 indicators
learning outcomes, content and teaching and learning activities.	86%	6 of 7 materials allow for easy navigation between the teacher and student resources, conveying the same essential theories and content	43%	3 of 7 indicators
	86%	6 of 7 material content and layout are accurate and clear	86%	6 of 7 indicators
17. The content	89%	8 of 9 users believe content is accurate and clear	66%	6 of 9 indicators
contained in the curriculum materials is accurate, coherent and	71%	5 of 7 material language and layout is clear, considering all users	71%	4 of 7 indicators
well organised.	92%	11 of 12 users report the language and layout is clear for all users	58%	7 of 12 indicators
	91%	10 of 11 users report that they can understand and use the materials easily	27%	3 of 11 indicators
18. The content is	88%	7 of 8 users believe that a range of students and teachers are able to relate easily to the content	63%	5 of 8 indicators
relevant to the Solomon Islands context, including indigenous culture,	100%	3 of 3 classroom observations found a variety of users can relate easily to the content	67%	2 of 3 indicators
traditions, and practices.	86%	6 of 7 materials provide a variety of content reflective of different user groups in Solomon Islands	57%	4 of 7 indicators

The learning activities are

As shown in Table 3 (outcome 14), evidence consistently showed that the materials describe activities that are achievable and relevant in Solomon Islands classrooms. Nearly all users believed that the

achievable and relevant in Solomon Islands classrooms, but the cost/value of the materials means the materials cannot be taken from the classroom

materials incorporate sufficient content and activities that are directly relevant to the local content. Additionally, the classroom observations showed some use of relevant activities within classrooms, with students engaged in and able to complete the activities.

The majority of materials reviewed also referenced local resources and included activities relevant to Solomon Islands context, such as sharing and comparing traditional and modern dance from Solomon Islands culture, and unpacking the meanings of traditional stories. In two of the classroom observations, teachers transferred this to practice, with a science teacher making use of local flora and fauna and a teacher of social sciences making connections to local landmarks.

Table 3 (outcome 15) also shows that the evidence was consistent in suggesting that the curriculum materials provide the content necessary for students to achieve the intended learning outcomes. The materials review indicated that most of the materials were found likely to cater for a range of students, including mixed levels of ability. Additionally, all of the users believe that the curriculum materials provide the necessary content to enable students to achieve the intended learning outcomes. This was corroborated by the classroom observations, where it appeared that all students were able to achieve the intended learning outcomes.

The curriculum materials provide adequate support for a range of students to achieve the intended learning outcomes

In the front section of the teacher guides, teachers are encouraged to devise extra activities for more able learners or to skip activities if people fall behind. However, the lesson plans do not include prompts to consider specific student strengths, needs, and interests and does not often suggest alternative approaches for students with different strengths, needs, or interests. The front of the year 7 health education teacher guide tells teachers to be selective in their use of the materials, relating this to the type of schools they attend, on the basis that this tends to reflect student ability. This is an assumption and teachers aren't told what to look for if, for example, a student has a particular affinity for health education or if a more academically able student at a national school has particular issues with regard to managing their health and well-being.

The evidence also showed that the learner books and teacher guides are aligned in terms of learning outcomes, content, and teaching and learning activities (outcome 16). All but one of the interviewees believed it is easy to navigate between the teacher and student resources. It was also believed that they convey the same essential theories and content. The material review corroborated this view, showing that the teacher and learner books are all closely aligned in structure and there is clear cross-referencing from the teacher guide to the student book.

The fact that the structure and much of the content of the books is similar across subjects must also help teachers to feel comfortable with the books, at least at the primary level. This repetition serves to

reduce teachers' "cognitive load" — the mental effort involved in processing information in the working memory. 13 14 It means that they can quickly familiarise themselves with the layout of the books, freeing their minds to attend to their content.

The curriculum materials are accurate, coherent and organised.

The evidence consistently showed that the content contained in the curriculum materials is adequately accurate and coherent (outcome 17). The content and layout of the majority of materials reviewed was accurate and clear, and communicated in clear language that is appropriate for users. The books are mostly written in English with occasional use of pidgin ("different island groups, not all wantoks"). Many of the materials have useful glossaries in both the teacher books and the learner books. Some materials go further, encouraging teachers to focus their students' attention on new words and discuss their meanings. However, it is a concern that the science and mathematics guides do not provide teachers with strategies for unpacking the scientific and mathematical language. In a nation where students bring such a rich array of languages to their learning, this is a noteworthy gap. It would be helpful for any follow-up materials for teachers to introduce such strategies, drawing on the literature about second language acquisition. 15

The material are accurate, clear and easy to use.

The users believed the content is accurate and clear, understandable and easy to use, and that the language and layout is clear for all but one user. One teacher indicated that some students struggled to keep up with the pace prescribed in the front section of the materials. This may have indicated a focus on curriculum coverage, rather than on what it was important for young people to learn.

Nearly every data point showed that the content is relevant to the

Solomon Islands context, including indigenous culture, traditions, and practices (outcome 18). For example, in line with the syllabus, the first chapter of the year 1 Social Science book is headed "Solomon Islands and the World", and activities throughout the social science texts move deliberately between a global view of the world to a Pacific view to a Solomon Islands view. This is consistent with the purpose of the NCS to facilitate learning for young Solomon Islanders that prepares them for their adult lives in their communities and as Solomon Islands citizens, while growing their understanding of and confidence in the place of Solomon Islands in the wider world.

The materials are relevant to Solomon Islands context.

When speaking to users, 7 of 8 users believed that a range of students and teachers are able to relate easily to the content. All classroom observations also showed that a variety of users can relate

<sup>&</sup>lt;sup>13</sup> Hasler, B. S., Kersten, B., & Sweller, J. (2007). "Learner Control, Cognitive Load and Instructional Animation". Applied Cognitive Psychology, 21, 713–729.

<sup>&</sup>lt;sup>14</sup> Kalyuga, S. & Sweller, J. (2004). "Measuring Knowledge to Optimize Cognitive Load Factors During Instruction". Journal of Educational Psychology. Vol. 96, 558–568.

<sup>&</sup>lt;sup>15</sup> Ellis, R. (2005). *Instructed second language acquisition: A literature revie*w. Wellington, New Zealand: Ministry of Education. Available at <a href="https://www.minedu.govt.nz">www.minedu.govt.nz</a>

easily to the content, with the body language of most students indicating they were engaged in the content during the lessons, even when the teacher delivery seemed less than engaging (that is, when teachers adopted a lecture style, with students making only limited contributions in response to closed questions). Additionally, all but one of the materials reviewed provided a variety of content reflective of different user groups in Solomon Islands. The attractive and colourful design of the student materials, with multiple illustrations, adds to the richness and accessibility of the content.

In the Solomon Islands context, it is acknowledged that teachers have often had little education themselves, including few opportunities for professional development. In 2009, just under two-thirds (62.55 percent) of Solomon Islands teachers had the right qualifications for the age and curriculum they were teaching. 16 Given the limitations around both pre-service and in-service teacher training, the detail of the instructions to teachers is probably justified. However, there could have been more prompts within the lesson plans suggesting how teachers could have translated the big ideas of a learner-centred and outcome-focused curriculum into their daily practice.

The material content is relevant, enabling student achievement in the Solomon Islands. It is recommended that teachers be given further assistance to notice the supports in the teacher books and to consider the ideas beneath them. This should include opportunities to see how other Solomon Islands teachers have enacted the activities and opportunities for professional discussion about their own experiences of using the materials and the impact on students. It would also be helpful for any follow-up materials for teachers to introduce strategies to unpack technical language, drawing on the literature about second language acquisition.

# 3.1.3 The support was and remains relevant to the New Zealand Aid Programme priorities and Solomon Island Government needs.

As at 2013, there is still room for One of the Millennium Development Goals is to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. Part way through the support being provided to the CDD, the Pacific Islands Forum Secretariat produced a Pacific Regional MDGs Tracking Report. The report highlighted

<sup>&</sup>lt;sup>16</sup> South Pacific Board for Educational Assessment (March 2012). Program design document for a regional pilot program in Papua New Guinea, Samoa and Solomon Islands. Pacific benchmarking for education results (PaBER). Adopted by the Pacific islands Forum Secretariat at a Forum education minister's meeting, 13–14 October 2010.

<sup>&</sup>lt;sup>17</sup>http://www.undp.org/content/dam/undp/library/MDG/english/MDG%20Regional%20Reports/AP/MDG%20Track%20 Rpt%20web%2020122.pdf, retrieved 22 March 2015.

improvement to achieve universal primary education in the Solomon Islands.

progress towards these goals across Pacific countries, including the Solomon Islands. It showed mixed progress for this country. Specifically, it found the net enrolment rate had recovered since its civil unrest between 1998 and 2003, and literacy rates have improved. Survival rate (proportion of pupils starting grade 1 who reach the last grade of primary) recorded only a slight improvement (85 to 88 per cent). In a more recent summary (2013), it indicated that there is still room for improvement to achieve universal primary education. <sup>18</sup> If these findings remain accurate, it is clear that the need to ensure access to quality basic education is the Solomon Islands continues to be relevant.

New Zealand Aid Programme priorities align well with the Solomon Island objective to provide quality education.

New Zealand remains focused on strengthening the national education system. <sup>19</sup> Additionally, the Solomon Islands had developed a specific outcome related to quality curriculum materials. Specifically, Outcome 3 (Quality) is that:

"All levels and dimensions of the Solomon Islands education system consistently demonstrate standards of excellence and deliver a quality education, which means high quality of learning achieved through provision of an adequate number of qualified teachers and other workers, in the education sector, relevant national school curriculum and local curricula, adequate number of modern relevant teaching and learning materials or facilities, sound standards of student literacy and numeracy". <sup>20</sup>

The Solomon Islands has a specific objective (c.f. section 3.4) to provide an adequate number of modern, relevant teaching and learning materials, facilities, equipment and materials.

The number of materials are not adequate to enable quality educational opportunities for current students in the Solomon Islands.

The number (c.f. sections 3.2.2 and 3.3.1) and types of materials (c.f. sections 3.2.9) published are currently not adequate to enable quality educational opportunities for current students in the Solomon Islands. This, coupled with "moderately high population growth (estimated at 2.3 percent annually) and a high proportion of youth in the population" within the Solomon Islands means that the need remains for publishing materials, and to a certain extent, for developing usable materials for the students.

Apart from the number of materials available to learners, teacher needs focus more on developing the ability to shift to an outcomesbased, learner-focused practice. The developed materials are designed for a teaching force that has had little formal training, is widely dispersed, and where schools do not appear to have a culture

<sup>&</sup>lt;sup>18</sup>http://www.forumsec.org/resources/uploads/attachments/documents/2013\_Pac\_Regional\_MDGs\_Tracking\_Report\_F INAL.pdf, retrieved 22 March 2015.

<sup>&</sup>lt;sup>19</sup> http://www.mfat.govt.nz/Countries/Pacific/Solomon-Islands.php, retrieved 22 March 2015.

<sup>&</sup>lt;sup>20</sup> Government of Solomon Islands. (2007a) Education Strategic Framework 2007–2015. http://www.paddle.usp.ac.fj/collect/paddle/index/assoc/sol031.dir/doc.pdf, pg. 13

<sup>&</sup>lt;sup>21</sup> http://www.mfat.govt.nz/Countries/Pacific/Solomon-Islands.php, retrieved 20 March 2015.

Teachers need support to enable the shift to an outcomesbased, learnerfocused practice. of professional learning. If a diligent teacher were to sit down carefully and read the teacher guide alongside the learner materials, they could certainly deliver lessons that were consistent with what could be called effective practice.

However, the shift to an outcomes-based, learner-focused curriculum requires more than a set of instructions for teachers to follow. This is an important consideration given the limited training and mentoring provided to teachers.

The materials provide limited information about why teachers should apply certain strategies, or little or no guidance about how to share the learning outcomes with students or discuss progress with them. The presence of the learning outcomes in the learner books suggests that teachers are expected to discuss them with students, but this is not made explicit. Terms such as "scaffolding" are not introduced or explained and the term "modelling" is used in at least one of the series, but without an explanation of how to do so effectively and through more explicit guidance in the materials.

The curriculum materials remain relevant to the local context, but a greater number of materials are needed to cater for current students in the Solomon Islands. There also remains a need to help teachers deliver an outcomes-based, learner-focused practice. In-service training that teachers and school leaders have asked for and that the CDC is keen to provide would support this shift. The training would best include what "scaffolding" and "modelling" looks lie, and indicate why teachers should apply certain strategies, and how to share the learning outcomes with students.

"This curriculum hem gut easy to follom bat content blong hem big tomas compare withem last one. Teacher nedem prober training for usem this fala new curriculum for givem gut fela something for all geta pikinini." "The curriculum is easy to follow but the content is more difficult compared with the last one. Teachers need proper training to use the new curriculum and approach for the children"

#### 3.2 Effectiveness of the support to the school sector

## 3.2.1 The curriculum materials provide adequate support to learners, and some foundational knowledge for teachers

A critical message from research is that the outcomes for students should be worth achieving, representing competencies that they and their communities regard as valuable.<sup>22</sup> The NCS represents a shift

23

<sup>&</sup>lt;sup>22</sup> Timperley, H., Wilson, A., Barrar, H., and Fung, I., op.cit.

from a curriculum that was structured predominantly to reflect foreign knowledge, skills, values and attitudes to one cater for the learning needs of Solomon Islanders. <sup>23</sup> It is clearly intended to support the achievement of the vision set out in the NEAP that sees quality education as the means for enabling all Solomon Islanders to "develop as individuals and possess knowledge, skills and attitudes needed to earn a living and to live in harmony with others and their environment". <sup>24</sup> The NCS is attentive to diversity, acknowledging that what young people need to learn differs with regard to their personal interests and capabilities and the opportunities available to them in their environment. This attention to diversity is also a reflection of international evidence about effective practice. <sup>25</sup>

The evaluation evidence showed consistently that the materials have the potential to support a range of learners and teachers in the Solomon Islands.

Table 4: Performance indicator dashboard: Outcomes 5 - 7

Outcomes		% Indicators: Achieved	% Indicators: Exemplary	
	86%	6 of 7 materials contain a range of activities for different students in the Solomon Islands	57%	4 of these 7 indicators
5. The curriculum materials provide a	80%	4 of 5 classroom observations found the students are engaged, showing the content is rich and compelling	40%	2 of these 5 indicators
range of learning opportunities to meet the needs of	80%	4 of 5 classroom observations found most students are actively engaged with materials in the classroom	0%	0 of these 5 indicators
all learners (diverse in terms of skills, culture, and motivations).	71%	5 of 7 users report a range of activities available for different students in the Solomon Islands	29%	2 of these 7 indicators
,	100%	4 of 4 teachers can provide examples of how the materials have helped them to develop learning opportunities that met a range of learner needs	25%	1 of these 4 indicators

<sup>&</sup>lt;sup>23</sup> Daudau, P. (2010). Teachers' Perceptions of Outcomes - Based Science Curriculum: A Case Study from Solomon Islands. A thesis submitted to the Victoria University of Wellington in partial fulfilment of the requirements for the degree of Master of Education.

<sup>&</sup>lt;sup>24</sup> MEHRD website: www.mehrd.com/101-uncategorised/157-mehrd-website

<sup>&</sup>lt;sup>25</sup> Alton-Lee. A. (2008). Making a bigger difference for diverse learners: The Iterative Best Evidence Synthesis Programme in New Zealand. In G. Wan, (Ed.). *The Education of Diverse Populations: A Global Perspective*. The Netherlands: Springer Science and Business Media.

Outcomes	% Indicators: Achieved		% Indicators: Exemplary	
	60%	3 of 5 users recognise learner progressions	40%	2 of these 5 indicators
	43%	3 of 7 materials indicate learner progressions	14%	1 of these 7 indicators
The curriculum materials support	86%	6 of 7 materials prompt links to learners' prior knowledge and to learning in other contexts (e.g., other learning areas and "real life"	0%	0 of these 7 indicators
teachers to build on prior learning and toward future learning.	86%	6 of 7 materials support teachers to notice and record evidence of learning and to use this to plan next steps	0%	0 of these 7 indicators
	80%	4 of 5 users report the materials support teachers to notice and record evidence of learning and to use this to plan next steps	0%	0 of these 5 indicators
	0%	O of 1 teachers able to talk about student learning and progress, using language from the curriculum materials	0%	0 of these 1 indicators
7. The curriculum materials provide learning that is relevant for students	100%	7 of 7 users report the materials convey a strengths-based views of content, examples and activities relating to everyday life in the Solomon Islands	86%	6 of these 7 indicators
who do not continue beyond basic education	86%	6 of 7 materials incorporate examples and activities related to everyday life in the Solomon Islands	57%	4 of these 7 indicators

The curriculum materials provide a sufficient range of learning opportunities to meet the needs of all learners.

The evidence showed consistently that the curriculum materials provide a sufficient range of learning opportunities to meet the needs of all learners (outcome 5), who are diverse in terms of skills, culture and motivations. All but one of the sets of materials reviewed contained a reasonable range of activities for different students in the Solomon Islands. The activities appear to be achievable for all learners, and some make good use of the local context (e.g., opportunities to consider pollution in Honiara or to explore different aspects of town and village environments).

Most classroom observations showed engaged students, all taking part in the learning. This was particularly promising given the local context, where classrooms were often open to the outside environment (i.e., no windows or doors), increasing the chance of distraction from the sights and sounds of local roads, neighbouring classes and other school activities.

The majority of users reported that the materials offer a range of activities suitable to students in different parts of the Solomon Islands. There were enough materials (content, activities) that they didn't have to borrow from other areas. The pictures were reported to help students with a range of abilities, and the activities allowed for a variety of students to participate. However, an experienced teacher commented that she thinks an unintended consequence of the comprehensive nature of the materials may be that teachers may

The thorough nature of the materials is

highly supportive but may reduce teacher independence depend too heavily on them. This comment was evidenced in some classrooms, with teachers using the materials as a script, including one teacher reading aloud the content to the students.

A critical characteristic of effective educative curriculum materials is that they help teachers to adapt the content and activities to meet the particular needs and interests of their students. This includes providing content for teachers that goes beyond what is required for the students so the teachers can explain concepts and respond to students' ways of understanding. This was achieved to a limited extent in some, but not all of the materials reviewed. For example, the only supplementary content information in the teacher books were within the sub-strand statements taken from the syllabus. There are no suggestions about where teachers can go to find more information. Teachers can get the answers from the book, but the information doesn't go much beyond this. In science, the teacher books frequently referred to a book called *Exploring Science*, which presumably helps fill this gap. However, the science teacher who was interviewed had not heard of it.

Some teachers provided examples of how the materials have helped them develop learning opportunities that met a range of learner needs. Teachers reported grouping students according to their level of understanding so that more advanced students could help those who were not so advanced.

How to plan for learning steps could be clearer, building upon prior learning, as could learner progressions.

The curriculum materials somewhat aid teachers in building on prior learning and toward future learning (Table 4, outcome 6). Most materials reviewed were found to assist teachers to notice and record evidence of learning during the class, and to use this to offer enrichment or remedial learning opportunities. The front part of the materials explains how teachers can "observe" students learning, either aurally or through their written activities, and check who has answered correctly. This section encourages teachers to use information to offer enrichment or remedial learning opportunities. The detail of the lesson plans provide useful suggestions about what to look for in students' responses.

The materials also incorporate templates on which teachers are encouraged to record evidence simply, with regard to whether outcomes were achieved (achieved, partially achieved, not achieved). However, there is nothing about how to use this to plan next steps for learning. The next steps for learning are contained within the materials, with little room for flexibility. When one lesson is completed, the class is to move to the next, with the only differentiation to student needs being to provide further teaching for students who have not achieved the learning outcome. For example, the year 5 health education book has nothing about noticing and responding to the particular needs of young people as they go through puberty.

As discussed in the previous section, there is a shift in the educational literature to a perception of teachers as "adaptive experts" who can respond flexibly to the particular needs and strengths of their students. A teacher who is an adaptive expert is able to use assessment for their own learning as well as for their students. They are also able to understand the rationale for changes such as those described in the National Curriculum Statement and can "retrieve, organise and apply professional knowledge to particular learning problems" 27.

The National Curriculum Statement clearly intends to foster assessment for learning and to describe a pedagogy that takes greater account of learners' needs in a range of contexts. However, the current set of materials are designed more to enable "the fidelity of programme implementation rather than whether the programme or approach is addressing the particular needs of *these* students at *this* time" 28. These materials are better attuned to help develop "routine expertise" – the necessary precondition for adaptive expertise.

These materials help develop "routine expertise" — the necessary precondition for adaptive expertise.

Most teachers corroborated the perception that the materials help them to notice and record evidence of learning. However, only one teacher talked about this in terms of learning outcomes, something he had learned about during his fairly recent experience of teacher training. The teachers talked about using assessment information to plan next steps, but only in terms of their movement through the materials. None of the teachers reported using the planning template provided in the teacher guide. Many did not even have the teacher guide and of those who did, few had actually used it (c.f. section 3.2.1).

The materials themselves do not discuss or prompt teachers to consider prior or future learning. Few materials indicated learner progressions. The materials themselves do not discuss or prompt teachers to consider prior and future learning. Useful discussion could be introduced, ensuring students understand and are prepared for later learning. Few teachers also recognise the learner progressions. Many did not seem to have a copy of the relevant syllabus document. The guides gave them valuable access to the learner outcomes in the syllabus, but only with regard to those for the specific year level they were teaching. It is recommended that teachers are given access to the complete syllabus documents and encouraged to discuss them with their colleagues, relating this to the students they teach.

When talking to teachers, language was sometimes an issue. It was difficult to distinguish between those who did not understand

<sup>&</sup>lt;sup>26</sup> The report uses the terms "adaptive experts" and "routine experts" to describe the shift in knowledge, understandings, and practice needed for teachers to move from being able to "implement prespecified programmes developed by others" (Timperley & Parr, 2012, p. 29) to being inquirers who can design and implement classroom programmes that are tailored to the specific needs, strengths, and interests of the learners in their classrooms.

<sup>&</sup>lt;sup>27</sup> Timperley, H. S. and Parr, J. M (2010). Weaving Evidence, Inquiry and Standards to Build Better Schools. Wellington: NZCER Press, pg. 29

<sup>&</sup>lt;sup>28</sup> ibid

questions, such as this, and those who understood but could not convey (in English) student learning and progress sufficiently. Only one teacher clearly understood the question and was able to indicate the learning and progress of students well enough for the response to be rated by the evaluators. However, s/he did not discuss outcomes or progress, but rather focused on the content and content delivery.

The materials provide relevant learning.

The data consistently showed that the curriculum materials provide learning that is relevant for students who do not continue beyond basic education (Table 6, outcome 7). All but one of the materials reviewed were found to incorporate examples and activities related to everyday life in the Solomon Islands. This included lessons on basic health care (such as personal hygiene and food from the garden), ways in which electricity is generated in villages, and activities that would be particularly relevant to those preparing for being an adult in the village (for example, the placement and construction of a good toilet).

Additionally, all of the 7 users asked reported that the materials convey a strengths-based views of content, with examples and activities relating to everyday life in the Solomon Islands. They particularly commented on the use of local photos and some also commented on the inclusion of localised stories.

Exemplary teaching practice would be for teachers and school leaders to deeply understand what it means to have an outcomes-based, learner-focused curriculum and how the curriculum and associated syllabi might translate with particular students in particular places in the Solomon Islands. The materials are likely to contribute significantly to routine expertise, and with further support or training, they may also foster some degree of adaptive expertise. For this purpose, the evaluation recommends that the materials are adapted to give deeper pedagogical guidance, and any such materials are delivered in conjunction with training. The evaluation also recommends that all teachers have access to the complete syllabus documents.

## 3.2.2 The materials delivered on most contracted outputs and outcomes, but other factors are hindering success.

The support provided by Technical Advisers has been utilised by the Director and many of the staff in the CDD (Table 5, outcome 28). However, the extent to which they were used, and the perceived level of success, varied by individuals.

Table 5: Performance indicator dashboard: Outcome 28

Technical Advisers supported the development of a range of materials but were not always used effectively

Outcome	% Indicators: Achieved			Indicators: xemplary
28. The support provided by TA's has/ is being	66%	2 of 3 PCDOs report that they use the Technical Adviser support	33%	1 of these 3 indicators
utilised by the Director and staff in the CDD	100%	2 of 2 Technical Advisers report that the PCDOs use the support	50%	1 of these 2 indicators

Specifically, two of the three Principal Curriculum Development Officers (PCDOs) report using the TAs and learning from them. They found the Technical Advisers useful, with one PCDOs indicating significant learning from the advisor's input. Another PCDO, however, believed that having a non-native Solomon Islands person as a Technical Adviser was not as useful as a Solomon Islands advisor could have been, given that the materials were being adapted to the Solomon Islands context from other textbooks.

The Technical Adviser reports were also mixed; although both were utilised, they had both positive and negative perceptions of the value of their services. One advisor felt that the advisor and PCDO had a very good system, whereby the PCDO would arrange the subject working group writers to submit their sections, which was done a timely fashion. The Technical Adviser would then critique the language and its appropriateness for the intended age-level. Both the Technical Adviser and PCDO would approve the content before it went to the publishers. Another advisor had a very different experience, whereby the PCDO was often not available when in-country and the materials reported as not prepared. However, other staff were believed to benefit from the advisor, as s/he supported other CDD activities.

It was also originally envisioned that the Technical Advisers would assist CDD staff to organise effective in-service and pre-service training materials with the School of Education. As evidenced in the document review, it was agreed that the advisors were not to carry out specific tasks relating to the training materials but rather focus on helping CDD to organise workshops between the CDD and School of Education from 2012. At least two workshops were delivered, including one three-day workshop and a one-day workshop, and included both the School of Education and CDD.

As in Table 6 (outcome 25), evidence shows some inconsistent evidence that the curricula and materials are accessible, but they are used, when available.

Table 6: Performance indicator dashboard: Outcomes 25 - 26

Outcome		% Indicators: Achieved		% Indicators: Exemplary	
25. The extent to which	63%	7 of the 11 users report curricula and materials are accessible			
curricula and materials are accessible	100%	1 of 1 distribution statistics suggest that curricula and materials are available and provided to schools			
26. The curricula and	100%	8 of 8 users report that they use the materials available	0%	0 of these 8 indicators	
materials are used by teachers	100%	5 of 5 classroom observations showed that users use the materials	80%	4 of these 5 indicators	

The publication receipts confirmed that the materials were produced and delivered to the ERU. Additionally, distribution material receipts, signed by staff at the school and the ERU, confirmed materials were delivered to and received by the schools. For four of the five specific schools visited<sup>29</sup>, the evaluation team were able to confirm delivery of produced materials to schools through these forms.

Teachers use the materials, in particular the student books, when available.

However, the materials are not always available or accessible.

Only 7 of the 11 principals and teachers reported that they could fully access the materials. The teacher guide was not available to some teachers. However, this feedback conflicted with the distribution receipts. When one school was shown a signed receipt of the teacher guide being received, it was recognised that the movement of teachers between schools may have meant that the materials were taken to the new school with the departing teacher. In another school, two teachers were sharing the teacher guide, which meant one of those teachers had only limited access.

In another discussion, for example, mathematics materials had been "found" in the school storage room by a teacher. Others suggested that they had not yet received the Health materials; when asked what they were using in the Health curriculum, they indicated that they were not teaching the subject because there were no available materials. In another school, some materials were stored in boxes in the management office, unopened.

All interviewees, without exception, noted that there were not enough student materials to accommodate all students.

Alton-Lee<sup>30</sup> uses the term "opportunity to learn" to explain a learner's access to learning, which includes the ability to access relevant and

<sup>&</sup>lt;sup>29</sup> One school had changed after the ERU was visited and forms were obtained.

<sup>&</sup>lt;sup>30</sup> Alton-Lee, A. (2012), op.cit.

engaging learning materials as and when needed. Classroom observations however uncovered school policies that required materials to be kept in storage to prevent their being lost. This further limited students' opportunity to learn, as they spent a considerable proportion of lesson time waiting for their teacher to fetch and distribute the materials, which then needed to be collected and returned to storage at the lesson's end.

Figure 1: Students waiting for the teacher to retrieve and distribute books, and then collect these at the end, is a daily classroom exercise

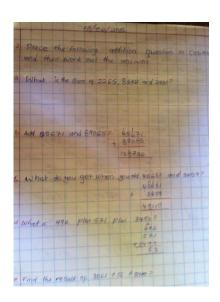
Students share learner books requiring schools to store and distribute books daily for each class



However, the teachers required the students to transcribe the activities into notepads so that the students could have notes to revise outside of the classroom. The teachers explained that the students could not take the curriculum materials home to read or study, as they were an expensive and irreplaceable resource. In all cases observed, the transcriptions included the details of the activity instructions. The learners took great pains to be accurate and neat in their transcriptions, carefully rubbing out and re-doing any errors. This process lessened the time available for engaging in the intended learning and may well have lessened their ability to attend to the learning purpose.

Figure 2: Learners diligently writing out the instructions from the learner books in a Social Studies, and separately, a Mathematics class





Teachers use the learner books, when available, but less so the teacher guides. The curricula and materials are used when these are available (Table 6, indicator 26), as confirmed in all interviews and classroom observations. However, it was more common that the teachers were using the learner books rather than both the teacher guides and learner books. As noted previously, this was sometimes due to not having these materials available within the school.

The support delivered on the expected outputs insofar as material development (capability development is discussed further below, c.f. section 3.2.4). However, the materials are not always accessible to those who need it. To further enable learning, it is recommended to raise awareness about the books, ensuring people gain access to appropriate numbers of materials, and explore options that would allow students greater access to quality materials, inside class for the full duration of the lesson time and outside of class time. It would also be important that learning time within class is maximised, without needing to transcribe lessons and learning activities into a secondary source, such as a notepad.

# 3.2.3. Materials sometimes present language and numbers at the right level, and provide layout and activities to support literacy and numeracy, but there is room for improvement

The literacy level and presentation of new vocabulary in the materials was sometimes at the right level. However, a review of student books by a literacy expert showed some examples where this could be improved. For instance, Year 1 students would be beginning to learn English. Although the literacy level in this Social Science book was considered appropriate, the Science textbook was considered "too high" for such students. If the language is too difficult, it may lead to students copying, or being asked to copy, text that would not have meaning. It would be better if students were presented new vocabulary in less complex ways. In some cases, the language was technical (e.g. Year 3 Science).

Some activities were considered appropriate to support literacy, but others did not support writing. For example, an activity in the Year 5 Health book requests that students "write some sentences about these pictures in your exercise book". However, without guidance, there is little for students to understand what is meant by this instruction. The result may be that students copy the sentences under each picture, which is encouraging bad literacy practice in the classroom.

The layout presents pictures and text, often aligning language concepts with pictures. There were some cases, however, where the picture was not appropriately aligning. For instance, a Year 5 Health book illustrates an overweight person saying "Don't overeat", but unsuccessfully pictures a person with heart disease (as well as

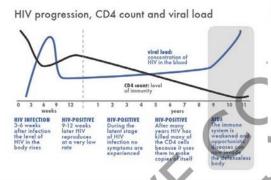
diabetes) with one leg and another person noting salt with no discernible effect.

The text was sometimes dense, particularly for young or non-native English speakers, or the activity includes space for writing but the students are not able to write in the textbook.

When materials were reviewed by a numeracy expert, a similar issue can arise with regards the numeracy requirements of learner books in subjects other than mathematics. Numbers are often included in activities to further understanding in Science, Health and Social Science. If the numeracy understanding required for these activities is beyond that expected of learners in these classes then this will negatively impact on their ability to learn from these activities. The Year 8 Health Learner Book includes examples of numeracy skills both beyond and at the expected numeracy understanding for learners of that year group.

In Figure 3, we have two examples from the Year 8 Health Leaner Book where the numeracy understanding required is likely to be above that of learners in these classes. In the graph on the left a split timeframe on the X axis would likely lead to confusion if not properly explained to learners. In the text box on the right, the significance of '0.002 percent' is unlikely to be understood by year 8 learners and understanding could be enhanced by explaining this is the same as '1 in 50,000 people'.

Figure 3: Numeracy understanding above expected level of learners



#### **HIV in Solomon Islands**

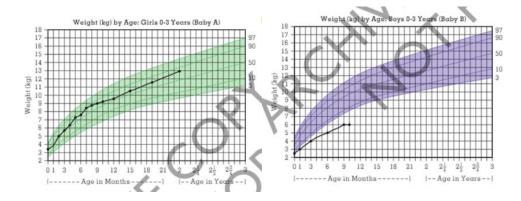
Solomon Islands is classified as a low-HIV prevalent country with an infection rate of 0.002 per cent of the total population.

The table on the opposite page shows the number of people diagnosed and living with HIV/AIDS, and those who died of AIDS-related causes in Solomon Islands in 2011.

Key populations in Solomon Islands believed to be at higher risk are men who have sex with men, sex workers and young women who have been coerced into sex.

In Figure 4, we see two charts from Chapter 8: Caring for babies from the same Year 8 Health learner book. In these cases the charts are enhanced through the use of grid lines and colour coding to aid in their use. Therefore the activity requiring learners to identify whether the baby's weight is healthy includes appropriate numeracy understanding for learners of this year group.

Figure 4: Numeracy understanding appropriate for expected level of learners



The materials delivered on some literacy requirements. However, further progress could be made in any future material development by ensuring a critical review of a literacy and numeracy experts across all materials during the development phase.

# 3.2.4. The Director and staff in the CDD utilised the TAs, but how and to what extent varied depending on the relationship and perceived need

The support provided by the TAs has been utilised by the staff in the CDD, with varying degrees of success. The mix of evidence suggests that the perceived need for the support, and to a lesser extent the agreed understanding of the Technical Adviser and PCDO mutual roles, influenced the uptake and usefulness of the support for PCDOs.

Technical Advisers could provide a variety of support... Overall, the support provided by UniQuest staff was used to: review and edit English grammar and overall flow of information within the materials; review content of chapters and its alignment with the learning intentions; review the materials alignment with the syllabi; provide feedback around the appropriateness of the content and activities to the level of student; and help the understanding of effective curriculum design, particularly when materials were being developed as new materials rather than adapting other materials for this purpose.

One of the three interviewed TAs was used extensively for all the above purposes. The PCDO understood their role as the coordinator of the materials. The Technical Adviser reviewed the materials, as submitted by the subject working group, and further developed these if necessary. While the advisor was in-country, they worked together

closely, identifying what was good and what needed further improvement in order to enable student achievement at various levels. Both the PCDO and Technical Adviser reported a successful working relationship, developing clear, accurate and useful resources, as well as the PCDO capabilities. Both feel confident in the PCDO's ability to write materials and lead in-service training, which was due in part to the Technical Adviser support and learning that occurred during this period.

...but were only used extensively by some PCDOs

However, the extent to which TAs were used varied. Interviews with one PCDO indicated that one Technical Adviser was sometimes left with little to do in terms of contract deliverables. The PCDO believed native-English-speaking TAs were not necessary to develop materials, as the content was being adapted from English materials into the Solomon Islands context. Rather than working with the PCDO on the required outputs, the Technical Adviser spent a portion of his incountry time revising the year 7-9 syllabus documents and also provided the PCDO with some basic word processing and internet skills (as reported in the monitoring documents).

A third Technical Adviser was used primarily to assist with material development, and a limited amount time was spent with the PCDO while in-country. It was also recognised by both the PCDO and the Advisor that materials were not always ready for the Advisor upon arrival. In lieu of having materials to review, the Advisor helped other CDD staff while in-country.

Towards the end of the contract, UniQuest focused efforts away from capability development and towards completing the materials, sometimes liaising directly with the publishing company, in order to finalise the agreed outputs.

Although the support contributed to a range of materials, it extended local capability of some while causing anxiety for others. This was an opportunity lost, which could have benefited others who may have needed or been more willing to receive assistance. It would be beneficial if any future support identified such individuals at the outset along-side clearly articulating the roles and responsibilities of both to improve uptake and use of any support.

# 3.2.5 Materials provide teachers with confidence and enable students to learn through activities. However, it is questionable whether teachers have substantially adapted their delivery style

The new curricula and accompanying materials were reported to have an impact on teachers' practice, with 3 of 4 teachers reporting a positive impact on their practices. Areas of reported impact were that classes were more learner-focused, which was exemplified as the classes now incorporated more activities than previously. The curriculum materials were viewed positively, providing a breadth of activities that the teachers can use within the classroom. A PCDO

Classes are more focused on learners doing the activities, but some classes remain teacher-focused although using the curriculum materials

corroborated this purpose; the materials include more information and activities since teachers do not have readily available resources within the schools. However, it was also clear that the breadth of the materials, which were developed to supplement the lack of available resources in the schools, were a concern for some teachers; some teachers reported that the materials included too much information, and were difficult to cover in the given time. This was particularly so with regard to the mathematics books, which do well to provide extensive opportunities for practice, but are very large. It became clear that at least some teachers understood that it was necessary to teach all topics and do all activities in the materials. It would be beneficial that teachers understand how to use the textbooks effectively, selecting materials as appropriate for their specific students.

Although teachers themselves suggested that the classes were more "learner-focused", in practice the materials were not always used as intended, with the focus on the learners' learning rather than the teacher's delivery of the content. Four of the five classroom observations showed teachers leading the class, with the teacher at the centre of learning. Although these teachers were using activities, a large portion of the lesson was teacher-led and whole class, with the teacher standing in front of the classroom discussing the activity and answers, as a class, during the class.

Figure 5 illustrates that when done well, learner-focused classes saw students working together, problem solving, checking each other's work and learning using local resources and materials, while the teacher was walking around and assisting the students with their learning.

Figure 5: Learners undertaking group work in Year 5 Science class





It seems that the materials assisted with the delivery of good teaching practice. However, it is unclear that the materials have changed

teachers understanding about the teacher-learner relationship and the importance of sharing control of the learning with the students.

Materials give teachers confidence and time Another positive impact reported by teachers was that they were more confident in teaching. The materials provide a collection and sequenced series of learning that they believed to be designed for effective learning. This also impacted on their time; some teachers reported that having the materials meant they no longer had to source various information and resources for the class, allowing more time for students to practice learning rather than cover simple theory. The incorporation of artefacts such as photographs and maps was greatly valued. However, it is important that the teachers still incorporate outside resources into the class. Effective teachers connect classroom learning to students' knowledge, experience, and identities and build upon the resources of the home, community, and place. 31

It is clear that the materials support teachers by enabling effective teaching practice. However, teachers may be using the materials in traditional ways of teaching (teacher-centred), with some teachers only adapting their practice insofar as adding more activities to the classroom. Learner-centred teaching, whereby students are at the centre of learning, is effective and known to impact positively on student achievement. It is therefore recommended to further support teachers to apply learner-focused education within the classroom through the provision of in-service teacher training and support materials that focuses on providing approaches for doing this and exemplifying the practice.

# 3.2.6. The curriculum materials contain some critical elements of effective pedagogy, but these are not regularly reflected in classroom practice.

The evidence shows the materials contain many elements of effective pedagogy, as outlined in the NCS and on the Best Evidence Synthesis on Quality Teaching. The mixed methods used here also illustrate that, although these enablers are present, they are not regularly put into practice.

First, the curriculum materials provide good opportunities for all students to achieve the learning outcomes, as shown in the indicator table below (Table 7, outcome 10).

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<sup>&</sup>lt;sup>31</sup> Alton-Lee, 2012 op.cit.

Table 7: Performance indicator dashboard: Outcome 10

Outcome		% Indicators: Achieved	% Indicators: Exemplary		
	100%	7 of 7 users have positive views about opportunities to achieve learning outcome/s	86%	6 of these 7 indicators	
materials provide opportunities for all students to	86%	6 of 7 materials align the learning opportunities with the intended outcomes	43%	3 of these 7 indicators	
	67%	2 of 3 classroom observations show that the learning opportunities are aligned with the intended outcomes	33%	1 of these 3 indicators	
57%		6 of 7 materials suggest a variety of learning opportunities	29%	2 of these 7 indicators	
		4 of 7 materials encourage teachers to adapt to individual learner needs	14%	1 of these 7 indicators	
	100%	3 of 3 classroom observations show a variety of learning opportunities	0%	0 of these 3 indicators	

The learning opportunities in the materials were generally aligned with the intended outcomes, with all but one of the materials reviewed showing adequate alignment. In the successful cases, the materials described a variety of types of learning opportunities that would seem rich enough to work for most students. The materials did not, however, offer alternatives for achieving the same outcome or suggest that teachers might try different approaches, conditions that are necessary if teachers are to respond flexibly to their students' learning, identities, and well-being. 32

The curriculum materials provide some useful learning opportunities, but these opportunities are lost without appropriate delivery.

There was a variety of learning opportunities provided in most materials, including activities which shift between individual, pair, group, and whole class activities, and some activities require learners to think about their answers, using their own knowledge or experience, or what they have read in the book. In the exemplary cases, chapter reviews, concept maps and revision activities, for example, also provided opportunities for students to embed the new learning, ensuring "effective and sufficient opportunities for all students to learn" <sup>33</sup>.

Some materials (4 of 7 reviewed) also encourage teachers to adapt to the individual learners' needs. The introduction to each of the Teacher's Guides includes the statement that the materials are "meant to give you ideas, not to tell you how to teach". However, the lesson outlines provide few suggestions about how exactly teachers might modify the activities to address particular students' needs, strengths, and interests.

<sup>32</sup> Alton-Lee, ibid

<sup>&</sup>lt;sup>33</sup> Alton-Lee, ibid

All users (7 of 7) reflected positively about the learning opportunities available to students, with many indicating that the materials provided excellent resources to use in class, allowing students to achieve the learning outcomes.

Two of three classroom observations also showed that learning opportunities used in class aligned with the intended outcomes. For example, students in the science class (c.f. 3.2.5, Figure 5) were looking at a variety of plant roots that they had collected, and were reflecting upon what they were seeing in terms of what the book had told them about the differences in root systems and the reasons for those differences. This activity focused on the learning outcomes specified in the materials. However, an opportunity was missed when the teacher had the students copy diagrams from the books rather than sketch the root systems of the real plants in front of them. This although the curriculum materials provide opportunities for all students to achieve the learning outcome/s, these opportunities are lost without appropriate and adaptive delivery.

Additional to the opportunities the materials provide, the curriculum materials contain a number of critical elements of the pedagogy recommended in the Solomon Islands (i.e., problem-posing, learner-centred, use of multiple intelligence), as shown in Table 8 (outcome 11). However, these were not always used in practice in the classroom.

Table 8: Performance indicator dashboard: Outcome 11

Outcome		% Indicators: Achieved		ndicators: kemplary
11. The curriculum materials contain the critical elements of the pedagogy	86%	6 of 7 materials include activities that prompt inquiry (e.g., problem-posing experiments in science, excursions, field work)	57%	4 of these 7 indicators
recommended in the Solomon Islands (i.e., problem-	40%	2 of 5 classroom observations show that activities prompt inquiry	20%	1 of these 5 indicators
posing, learner- centred, use of multiple	100%	7 of 7 materials create positive connections to students' lives, identities, and aspirations	57%	4 of these 7 indicators
intelligence)	100%	4 of 4 classroom observations found positive connections were made or encouraged students' lives, identities, and aspirations	50%	2 of these 4 indicators
	100%	7 of 7 materials prompt thoughtful discussion	57%	4 of these 7 indicators
	0%	O of 3 classroom observations found activities to prompt thoughtful discussion	0%	0 of these 3 indicators
	100%	7 of 7 materials include opportunities for group work (e.g., group research, role play, drama)	43%	3 of these 7 indicators
	20%	1 of 5 classroom observations show group work	0%	0 of these 5 indicators
	71%	5 of 7 materials prompt self-reflection and self-monitoring (e.g., discussion re- student progress relative to outcomes)	14%	1 of these 7 indicators

Outcome		% Indicators: Achieved		ndicators: kemplary
11. The curriculum materials contain the critical elements	50%	1 of 2 classroom observations found the materials prompt self-reflection and self-monitoring	0%	0 of these 2 indicators
of the pedagogy recommended in the Solomon Islands (i.e., problem-	14%	1 of 7 materials begin lessons with determining what students already know	0%	0 of these 7 indicators
posing, learner-centred, use of multiple intelligence)	0%	O of 3 classroom observations show that lessons begin with determining what students already know	0%	0 of these 3 indicators

Although materials include activities that prompt inquiry, thoughtful discussion and group work, these may not be delivered as intended.

Most materials include activities that prompt inquiry, such as providing problem-posing experiments in the activities, as well as group work. The teaching methods section includes an explanation of the value of group work and how to ensure it is effective. It emphasises the value of active learning and explains the role of the teacher. There is a similar discussion regarding debate, discussion and presentations (primarily role play).

However, fewer than half of the classroom observations (2 of 5) showed activities being used to prompt inquiry, which included excursion activities or field work, or problem solving in class.

All materials prompt thoughtful discussion, such as including open questions rather than closed questions, brain storming, peer teaching. However, these activities were not engaged with as expected in the classroom. None of the three classrooms observed engaged in activities to prompt thoughtful discussion (for example, the use of open questions rather than closed questions, brain storming or peer teaching). The activities and questions were directed by the teacher, and were used to quiz students, as a class. Also, the classroom observations showed few examples of students actively taking part in group work (1 of the 5 classrooms observed), with only one class evidencing group research.

All reviewed materials also included opportunities for group work (e.g., group research, role play, drama), but only 1 of 5 classrooms showed students working together. It is clear that, although materials include activities that prompt inquiry, thoughtful discussion and group work, these may not being delivered as intended.

Neither the materials nor the classroom observations showed adequate attention to beginning lessons with determining what students know

Although the materials are positive and clearly intended to prompt the "problem-solving approach" intended by the NCS, few of the materials began each lesson with a prompt to teachers to determine what students already know. The materials did include a section on outcomes-based education and the learner-centred approach, which explains that learning builds on previous ideas, knowledge, skills, and experience. There were examples of teachers being encouraged to surface students' prior knowledge, experience, and ideas and use it in the lesson. This is seen, for example, in a Social Studies book by involving a brainstorming activity to define the term "culture" and in a pair activity for health education where students shared situations that

prompt different emotions. However, teachers were not encouraged to design lessons around this information, but rather to move them through the materials. It is therefore unsurprising that none of three classrooms observed (from the beginning of the lesson) began with determining what students already know.

Making positive connections to students' lives was evident in the materials and classes.

Classroom observations showed that teachers were very effective at making positive connections, with teachers talking positively about the environment, community and Solomon Islands history. The materials assisted with this, encouraging teachers to make positive connections with students' lives, using inclusive language such as "we", prompting personal connections for students (for example, "How would you feel if...") and including activities involving the home and/or community.

Teacher guides, when used, can help reporting The evidence showed that, when the teacher guides are used, they can assist with a reporting regime that makes learner progress transparent and ensures teachers are accountable (outcome 13).

Table 9: Performance indicator dashboard: Outcome 13

Outcome	% Indicators: Achieved			Indicators: Exemplary
13. Teacher guides support a reporting	100%	7 of 7 teacher guides contain reporting template example/s	0%	0 of these 7 indicators
regime that make learner progress transparent and ensure teachers are	100%	7 of 7 teacher guides explain the purpose and process of reporting	0%	0 of these 7 indicators
accountable to learners, families, and other stakeholders in the education system	50%	1 of 2 users report that teachers can explain how the materials have helped improve reporting practice	0%	0 of these 2 indicators

All teacher guides reviewed contained reporting templates and explained the purpose and process of reporting. However, only two teachers used these materials, and just one of these was able to explain how the materials improved their reporting practice. These teachers used weekly assessments provided within the materials, and they talked to parents about assessments at the end of the term about the learners' progress.

Although materials encourage using local resources, this is only sometimes applied

The evidence also showed consistent evidence that teachers and school leaders are encouraged to take an active, problem-solving approach to implementing the curriculum in the local context (outcome 8). Specifically, all materials provided examples promoting the use of local people and resources. However, only half of the four classroom observations found classes using local resources.

Table 10: Performance indicator dashboard: Outcomes 8 - 9

Outcome		% Indicators: Achieved		Indicators: xemplary
8. Teachers and school leaders are encouraged to take an active, problemsolving approach to	100%	7 of 7 materials illustrate examples promoting the use of local people and available resources	71%	5 of these 7 indicators
implementing the curriculum in the local context	50%	2 of 4 classroom observations found learning examples using local resources	25%	1 of these 4 indicators
9. The curriculum materials set a clear purpose for learning	86%	6 of 7 materials have a clear articulation of long-term purpose with reference to the outcomes (where possible) and to how the learning will enable learners to address everyday problems	14%	1 of these 7 indicators
	100%	3 of 3 users report a clear understanding of purpose and why it is valuable for learners	0%	0 of these 3 indicators

Additionally, most of the materials (6 of the 7 reviewed) articulate a clear long-term purpose, and users report understanding that purpose (outcome 9).

The materials provide support to effective teaching practice. It is clear, however, that this support is not sufficient for teachers to deliver an effective pedagogical practice. As these practices are known to impact positively on student achievement, it is recommended to further support teaching practice, ideally through professional development focused on practice or coaching rather than theoretical provision (the delivery of big ideas disconnected from practice) in order to improve student outcomes in the Solomon Islands. To allow capability-building within schools, this support should be accompanied by materials that show the transfer of the new pedagogy to the actual practice of real teachers in real classrooms. The materials would best contain suggestions about how school leaders can support staff to learn from and with each other. The support would show alternatives for achieving the same outcomes or suggest that teachers might try different approaches. These are conditions that are necessary if teachers are to respond flexibly to their students' learning, identities, and well-being.

# 3.2.7. Materials assessment activities and approach are aligned with some good assessment practice but many users are not yet using these as would be expected

In line with the Best Evidence Synthesis and Visible Learning<sup>34</sup> findings, the central purpose of assessment is to inform teaching and learning. Specifically, outcomes-based curricula should begin with the identification of the outcomes for learning and then link these outcomes to all planning, teaching, and assessment decisions.<sup>35</sup>

The Solomon Islands NCS is clearly informed by this idea:

Assessment is a continuous planned process of gathering, analysing and interpreting information about learner's knowledge, understanding, skills and attitudes in the various subjects. Assessment judges whether the outcomes have been achieved, and enables learner progress to be reported. It will also assist teachers making informed decisions on how to improve the learning of the learner as well as improving the teaching process at the classroom level. <sup>36</sup>

However, there were mixed results regarding assessment activities and overall approach, with only some evidence of good assessment practice, as shown in Table 11.

Table 11: Performance indicator dashboard: Outcome 12

Outcome		% Indicators: Achieved	% Indicators: Exemplary	
12. The suggested assessment activities/ approaches are aligned with evidence about good assessment practice and the learning outcomes contained in the National Curriculum and relevant syllabi	60%	3 of 5 users reported teachers/students using assessment information for feedback and feed forward	20%	1 of these 5 indicators
	50%	3 of 6 users reports teachers using assessment as a diagnostic tool / PCDO understand assessment purpose	17%	1 of these 6 indicators
	86%	6 of 7 materials provide strategies to promote assessment for learning	14%	1 of these 7 indicators
	67%	2 of 3 classroom observations found strategies being used to promote assessment for learning	0%	0 of these 3 indicators
	43%	3 of 7 materials make learning outcomes clear to students	0%	0 of these 7 indicators
	33%	1 of 3 users reported teachers using assessment information to adjust practice	0%	0 of these 3 indicators

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<sup>&</sup>lt;sup>34</sup> Hattie, 2008 & 2012, op.cit.

<sup>&</sup>lt;sup>35</sup> Daudau, P. (2010). Teachers' Perceptions of Outcomes - Based Science Curriculum: A Case Study from Solomon Islands. A thesis submitted to the Victoria University of Wellington in partial fulfilment of the requirements for the degree of Master of Education, p. 16.

<sup>&</sup>lt;sup>36</sup> Ministry of Education and Human Resource Development. (2012). Solomon Islands National Curriculum Statement: Education for a better future. Curriculum Development Division, MEHRD, Honiara, Solomon Islands., p. 36.

% Indicators: Achieved		% Indicators: Exemplary	
33%	1 of 3 classroom observations found students were able to monitor learning	0%	0 of these 3 indicators
0%	0 of 3 classroom observations found that learning outcomes were clear to students	0%	0 of these 3 indicators

The Teacher Guide describes 'assessment for learning' in line with effective assessment pedagogy, and student books include assessment activities which teachers use

The materials provided strategies to promote assessment for learning (outcome 12). The front section of all seven Teacher's Guides included a sub-section entitled "Assessment: recording, monitoring, and reporting', describing assessment as a "continuous planned process of gathering, analysing and interpreting information about learners' knowledge, understandings, skills and attitudes in the various subjects". The description implicitly links assessment to the learning outcomes. The link to outcomes is made again in the section on "Reporting learners' achievements", which describes how achievement is assessed in terms of outcomes achieved. It is never explicitly stated that it should be. The Guide does explicitly use the term 'assessment for learning' and the approaches described are certainly in line with effective assessment pedagogy.

There is list of assessment techniques and each chapter (sub-strand) ends with an assessment activity. Although assessment activities are present, some assessment activities may not assess competence as well as possible. For example, an assessment activity in the Health Education materials (Chapter 4 – Basic First Aid) had students ordering a set of pictures demonstrating a procedure, but a better measure of competence would be to observe them role-play one of the procedures, as they do in other activities. This would have enabled the teacher to discover whether the learners could actually use the new procedure to address a potential real event. In fact, an observation checklist is supplied but not linked to this purpose.

About half of users suggested that they use strategies to promote assessment for learning, with 3 of 5 teachers talking about how they use assessment information for feedback and feed forward, and 3 of 6 teachers exemplifying how they use assessment as a diagnostic tool / PCDO understand assessment purpose. For example, one teacher uses assessment to determine who needed extra help, which is given after school, or who needed more work to do. The teacher used exercises in the student book, mixing them up to cover the learning objectives. As a class, they review the test.

These conversations were corroborated in the classroom observations (when possible), with 2 of 3 classrooms using strategies to promote assessment for learning. Sometimes a teacher checked the students' work while walking around and examining the activity books. In another example, the students reviewed their work against the answers provided at the end of the book, correcting their own work and then the class reviewed these. The teacher monitored what they were doing and checked their work as they were working. This evidence clearly shows that assessment is provided and used.

Despite this, only 1 of 3 teachers reported that they were using assessment information to adjust practice. Most teachers viewed assessments as information about students rather than information for teachers (assessment for learning)<sup>37</sup>.

Although assessment is used, teachers are not using assessment to adjust practice, and learning outcomes are not clear to students Additionally, learning outcomes were not clear to students. The learning outcomes were elaborated to students in only 3 of the 7 student materials reviewed. Teachers are never prompted to share the learning outcomes with the students, and lessons do not begin with a discussion of learning outcomes and criteria for success. Classroom observations showed similar results, with none of the students in 3 classrooms observed were given clear learning outcomes and success criteria. Without this explicit understanding, students are unable to monitor their own learning.<sup>38</sup>

The materials provide some support to use assessment to inform teaching and learning. This support, however, is not sufficient for teachers to use the outcomes effectively across their planning, teaching, and assessment decisions or to engage in meaningful discussions about progress with students. These are the central tenets to outcomes-based education. It is recommended that the MEHRD further support teaching practice, exemplifying what outcomes-based education looks like in practice and how teachers can be using assessment for their practice and student's monitoring.

# 3.2.8 The materials help teachers to understand some aspects of effective teaching and learning

Education materials are one of four mediating arenas for bridging research and practice, along with pre-service and in-service education, policy, and the public. <sup>39</sup> Educators need to align work in each of these areas with the knowledge base on effective teaching and learning that is building over time, and there should be two-way links between research and classroom practice and between each of the four arenas and the knowledge base.

The evidence shows that the materials provide some foundational knowledge important for effective teaching and learning. The materials encourage teachers' understanding of the new pedagogy, to see what it looks like and to put it into action (i.e. the educative curriculum materials), as shown below in Table 12.

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<sup>&</sup>lt;sup>37</sup> Joyce, C., Spiller, L., and Twist, J., *Self-assessment: What teachers think – summary report for teachers.* NZCER, Wellington, 2009.

<sup>38</sup> Hattie, 2008, op.cit.

<sup>&</sup>lt;sup>39</sup> Donovan, M.S., Bransford, J., Pellegrino, J. (eds.), 1999. How People Learn: Bridging Research and Practice. Washington, DC: National Academy Press.

Table 12: Performance indicator dashboard: Outcome 19

Outcome		% Indicators: Achieved		Indicators: xemplary
19. The curriculum materials support teachers to understand the new pedagogy, to see what it looks like, and to put it into action	100%	2 of 2 teachers can talk about how they have adapted ideas to their particular context/students	50%	1 of these 2 indicators
	100%	7 of 7 materials provide explanations		
	100%	3 of 3 stakeholders talk positively about the pedagogical knowledge conveyed in the materials	33%	1 of these 3 indicators
	100%	4 of 4 users report explanations are clear to them	25%	1 of these 4 indicators
	67%	2 of 3 teachers can talk about changes they have made to their practice as a consequence of the materials	0%	0 of these 3 indicators

All materials reviewed provide explanations. The front section of the Teacher's Guide explains the intended pedagogy, calling it "problemposing education". The material points out that when students are simply tested on knowledge transmitted by the teacher, they can often regurgitate that knowledge without understanding it; "Learning by doing" is explained as students having to think for themselves, and as a result, being better prepared to cope with new situations.

The teacher books assist teachers' understanding of the new pedagogy.

Additionally, the front section of the Teacher's Guide describes approaches to teaching and assessment that are in line with the new pedagogy. It highlights the importance of good planning and preparation to implement these approaches. The descriptions of specific approaches also included rationale (e.g. "Field work helps learners to link classroom learning to real-world experience outside the classroom"). Other sections provide further notes to assist teachers to implement the new pedagogy, and the appendices include useful templates.

The discussion notes are extensive and anticipate a range of possible learner responses. However, the explanations are not backed by extended examples of the suggested approaches in action.

Teachers (4 of 4) reported that they understood the explanation in the teacher books. All teachers who answered the question (3 of 3) reflected positively about the pedagogical knowledge conveyed in the materials, and 2 of these teachers were able to talk about the changes they made as a consequence of the materials. For instance, it was recognised that previous to the materials, teachers were teaching "like a lecturer", trying to get through the content and there was no time to do activities. But now, this has changed; students are doing activities and it doesn't feel rushed. Another teacher also discussed doing the activities, such as field work, which was not previously done.

Table 13: Performance indicator dashboard: Outcomes 20 - 21

Outcome		% Indicators: Achieved		Indicators: xemplary
20. Content	80%	4 of 5 teachers talk positively about the impact of the materials on their content knowledge	60%	3 of these 5 indicators
knowledge: The curriculum materials support teacher content knowledge.	43%	3 of 7 materials build teacher content knowledge that goes above and beyond what is required for the students so the teachers can explain concepts and respond effectively to students	29%	2 of these 7 indicators
21 Dedograpical	67%	2 of 3 teachers can talk about specific strategies they have applied in particular lessons (e.g. a problemposing approach in science)	33%	1 of these 3 indicators
21. Pedagogical content knowledge	43%	3 of 7 materials build knowledge at the intersection between content and pedagogical knowledge (e.g. the specific knowledge necessary to be a teacher of science)	14%	1 of these 7 indicators

Although only some materials were viewed as contributing to teacher content knowledge, practice, and views of self as a learner, they further develop some teachers.

Although only some beyond what is required, so teachers can explain concepts effectively to students (content knowledge), as well as build knowledge necessary to be a teacher of a specific subject (e.g. pedagogical content knowledge). There were also few or no suggestions about where teacher teacher teacher teacher.

Nevertheless, it appears that the materials are helping and further developing some teachers. Most teachers (4 of the 5) talk positively about the impact the materials have on their content knowledge. Some areas of development included new algebraic techniques (math teacher), as well as new concepts and language. Additionally, 2 of 3 teachers can talk about specific strategies they have applied in particular lessons. For instance, a teacher grouped students according to their understanding of mathematics so they can help each other.

Similarly, the evidence was mixed in regards to whether curriculum materials encouraged teachers to see themselves as learners alongside their students.

Table 14: Performance indicator dashboard: Outcome 22

Outcome		% Indicators: Achieved		Indicators: xemplary
22. The curriculum materials support teachers themselves to take a "problem-posing	100%	2 of 2 stakeholders talk positively about the support curriculum materials provide to re-position teachers as learners	0%	0 of these 2 indicators
approach to education" that positions them as learners alongside their students	0%	0 of 7 materials contain elements to prompt teacher inquiry into the impact of teaching on student learning	0%	0 of these 7 indicators

None of the materials reviewed contained elements to prompt teacher inquiry into the impact of their teaching on student learning. This would have included reflective questions, or prompts to engage with colleagues on practice. Nevertheless, 2 of 2 teachers who were able to respond spoke positively about the materials positioning them as learners. However, these views were not exemplified well, with both teachers merely indicating that the change had occurred but unable to say how.

The materials provide some foundational knowledge to enable effective teaching and learning. This support will be helpful to some, particularly those who regularly use both the teacher and student books, which is unfortunately not typical. However, even both materials are insufficient as a single resource for learning how to be an effective teacher. To use the materials effectively, it would be necessary that teachers come to use these books with the necessary foundational knowledge, or that they are supplemented with other professional materials or development. The aspiration of the NCS is to foster lifelong learning. Even the best of teachers requires ongoing professional support if they are to be adaptive teachers who can use content and activities in adaptive ways that meet the specific learning needs of the learners before them.

# 3.2.9 Various factors affect the development, publication, and use of high quality curriculum materials

The materials produced as part of the support achieved many of the outcomes outlined in the contract, meeting the demands for improved learning outcomes in the Solomon Islands. Additionally, there were generally wide-spread favourable views about the materials amongst PCDOs, Technical Advisers, teachers and school leaders, although some of those who took part in the development process were more mixed in their views regarding processes associated with the support.

An analysis of factors that have helped or hindered the achievement of the development, publication, and use of high quality materials is provided here:

Managing with limited resources takes careful planning and proactive coordination

1. Coordinating and managing limited resources: effectiveness of developing materials is dependent upon various individuals, including Subject Working Group members, the CDD Director, Technical Advisers, Publishers and with Principal Curriculum Development Officers at the centre of facilitating and managing the process. The process, when done well, is inclusive and iterative, taking advantage of the expertise available to produce quality materials at each unique stage of development. This expertise is supported through funding arrangements (e.g. payments for subject working group members to develop materials, the support provided through the contract with UniQuest) individuals' and various by time writers/teachers, short term Technical Advisers), all of which are

a limited resource. The reliance on multiple sources of resourcing puts the development process at risk, particularly as the process requires careful planning and time management to make the most use of the resources when they are available. The decision making process is also reliant on multiple individuals, which can slows the process.

Identifying successful project management templates and proactive coordination techniques and practices, and sharing these amongst all relevant individuals can support the timely delivery and associated project management processes.

Ensure relational roles and responsibilities are understood and valued

2. Understanding and valuing the relational roles and responsibilities: The effectiveness of the support as it relates to capability development is largely dependent on people, including their understanding and appreciation complementary roles and responsibilities within a larger process. Descriptions of team member's roles only minimally identify who does what (expected output) and when and how these process steps are interdependent. The responsibilities should clearly identify how decisions are made, and how the expertise of each role complements each other and the process. When individuals understood and respected their mutual and complementary roles as part of a process, the development process worked well. However, the development process slows and opportunities for capability development suffer when there are disputes about roles and responsibilities, or lack of adherence to understood deliverables. Relationships can deteriorate quickly as a result.

Establishing clarity and need, at the outset, while clarifying the direction of such support would extend the benefits of support, particularly when capability development (as well as efficient development processes) are core features of the support.

Make sure all of the right people are aware of the available materials

3. Awareness of resources: Distribution of materials and information is often viewed as complex within the Solomon Islands. Sending materials to school was managed by the Education Resource Unit, who forwarded the books to the school leaders, who sign a receipt upon delivery/pick up. In some schools, these books were then provided to the teachers, who began using them within the classroom. However, pertinent school staff were not always aware of the materials available to them; boxes of materials sometimes sit, unused, in storage, hallways or offices. Additionally, school leaders (if they transferred schools) were not always aware of what materials were provided previously to the school.

Communications could be improved, and perhaps marketing the materials along with other educational campaigns could build awareness, enabling access and use within the classrooms.

4. Costs and type of published material can inhibit learning

opportunities: The materials have been published to encourage student engagement (pictures, colour) and longevity (greater than a 10 year lifespan). The materials are recognised as engaging students who may not otherwise be engaged. However, the costs along with the limited resources available to the Solomon Islands require that schools *protect* the learner books from misuse, overuse, and subsequently maximise use.

Develop materials that maximise learning opportunities

It would be important to extend the available materials to maximise the learning opportunities available for students, as noted in previous sections. These may include developing relatively inexpensive workbooks, photocopying appropriate content for students, providing electronic devices and/or developing e-textbooks across curriculum areas. These example options, as well as others, would need to consider sustainability and relevance to the Solomon Islands context.

# 3.2.10 The development, publication, and use of curriculum materials developed individual capabilities, positive local role models, and further enabled teachers and engaged students

Individual capabilities were built through the development process

The development, publication, and use of curriculum materials have resulted in long-term benefits for a range of individuals. Two CDD staff members believed that individual teacher capabilities were extended by simply taking part in the Subject Working Group. They are believed to develop writing skills by writing chapters for the materials, but also gain a greater understanding of effective teaching and learning practice. Additionally, they are believed to develop an understanding of good curriculum design by taking part in the feedback loop, from the Technical Adviser and PCDO and by reviewing the critical feedback and suggested changes, while also valuing their specific expertise by being part of the decision making process.

Additionally, a PCDO reported that s/he is now writing materials. It was viewed that this would not have been possible without the learning achieved from the process, as well as the support provided by the Technical Adviser.

Second, by publishing materials that students use, the writers serve as a positive, local role model for the students and community. In one cited case, the writer visited a school with a PCDO, who talked to students about the materials. The PCDO had, on this occasion, pointed out that the author was with them. Students audibly noted her presence, with one being cited as being surprised that the author was

Positive local role models

a Solomon Islander. It was believed that this illustrated to students that they, too, can be an author of a published material.

A negative effect of publishing such high-quality materials is that learning time in class is greatly reduced, requiring teachers to distribute and gather the materials during sessions from offices or teacher rooms (c.f. section 3.2.2). This could be mitigated, in the meantime, by the provision and use of adequate lockable storage facilities within classrooms.

Further enabling teachers and engaging students The use of the materials is more recent, but is already recognised as supporting teacher practice, providing teachers with confidence and enabling student learning through activities (c.f. section 3.2.5). All of the teachers were seen to be using the materials, including the activities, during classes. Although the curriculum materials alone are not sufficient to improve pedagogy and student achievement, they provide a useful foundation from which to enable competent teachers, and support for those who are less trained or able.

The materials were also noted as getting students attention, and in particular, engaging those students who would not have otherwise been engaged in learning. This finding was corroborated in class, with students engaged in the materials.

### 3.3 Efficiency of the support design and activities

# 3.3.1 The allocation of resources was suitable to achieve quality materials, albeit with time inefficiencies and a number of delays.

The evidence clearly showed that the costs were "worth it" (i.e., it met the standards for relevance, efficiency and effectiveness), with inputs 40 and many of the activities necessary to achieve these outcomes.

Costs were acceptable, but...

The total support for the contract included 573 Technical Adviser days from 2010 to 2014, with an overall contract prices of \$810,437 (75% consultant fees and 25% expenses). It is understood that the overall contract costs for the range of contracted outputs met an acceptable standard, as these were agreed between MFAT and UniQuest.

These support days were delivered across four advisors supporting curriculum material development in health, social studies, mathematics and primary science. These inputs contributed to the 32 materials produced as part of the UniQuest contract, and an additional 8 materials were produced.

Earlier progress reports suggest that a number of materials were

<sup>&</sup>lt;sup>40</sup> The overall contract cost for the range of contracted outputs met an acceptable standard, as agreed between MFAT and UniQuest, and therefore is out of scope.

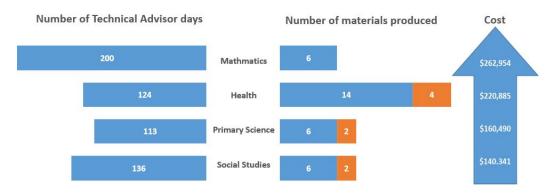
...many delays occurred.

"delayed" (53 per cent of the 32 materials). In most cases, the progress reports did not clearly indicate when materials were completed, but rather indicated if they were "in progress" or "with Pearson". An analysis of five contract variations identified extended deadlines, with dates amended for 2 separate Science materials, 11 Heath materials and 4 Mathematics materials. Social Science was the only subject area that did not extend the earlier, agreed deadlines. Interviews with both UniQuest and CDD suggested that all materials are now complete.

The lack of engagement can be costly

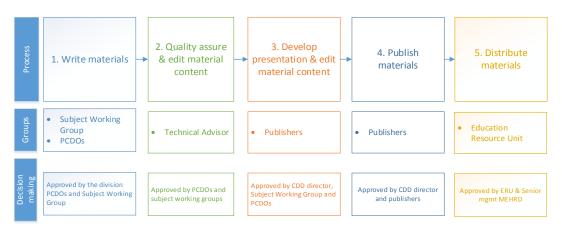
As shown in Figure 6, the costs associated to each subject area are disproportionate, with Mathematics attracting the highest cost and number of Technical Adviser days while producing the fewest number, albeit longer, curriculum materials. The document review and interviews suggested that this was due, at least in part, to the lack of understood joint responsibilities and the perceived lack of need for this specific support. Both factors were believed to affect engagement and production of materials.

Figure 6: Number of Technical Adviser days and materials produced, according to cost



Most steps used to produce these worthwhile materials were necessary to achieve the outcomes Apart from the inputs, most activities used to produce these worthwhile products were necessary to achieve the outcomes. The following process map was developed with the PCDOs, outlining the high-level steps that were intended to be involved with developing curriculum materials. When interviewing individuals, 4 of 5 users reported that the process steps were ideal. The process, in practice, is often not as linear as depicted below, with each step often requiring review and iterative development, and sometimes the materials go back to the beginning, if required.

Figure 7: Tasks, roles and approval process for material development, publication and distribution



Step 1 was believed to be a robust process, as noted consistently by PCDOs, ensuring the materials were fit for purpose in the Solomon Islands. One Technical Adviser also noted that the process was appropriate. The previous Technical Advisers, as part of a separate contract supported by a different agency, established the format of the chapters. These templates were provided to the subject working group who were mostly teachers and lecturers (for example, from the School of Health Education) and specialists in the subject field (for example, health, science). However, they may not have been specialists in curriculum design.

Writing
materials is an
effective
although not
always
efficient
process, using
local teachers
and lecturers
to develop
new or adapt
existing
materials

The writers developed chapters in different ways, which was believed to impact on the need for Technical Advisers. The materials were sometimes developed as new content, and other times they were adapted from other published textbooks for the Solomon Islands context. The subject working group therefore was required to develop content, often pulling together materials from various sources, or they adapted texts to the local context, including reference to the local land, people, language, and so on. It was also reported that the subject writers also trialled these materials in classes.

Step 1, although believed effective, was not always efficient, as recognised consistently by PCDOs interviewed. Prior to writing the chapters, the PCDO established timeframes and identified who within the subject working group will be writing specific chapters. The materials were then provided as complete draft chapters from the writers to the PCDO, who then prepared them for (or forwards them to the TA). As reflected in the interviews and document review, these deadlines were sometimes missed. For instance, the document review indicated that Science and Social Studies were delivered in timely fashion, whereas Primary and Secondary Health and Mathematics experienced continued delays.

Interviews suggested the reasons behind these delays included the iterative process and being dependent upon multiple individuals, each writing different chapters, and to whom payments/stipends to deliver

work were not always available.

In one example, a PCDO was recognised as effectively monitoring and controlling this iterative process. The PCDO consistently ensured the materials were ready and prepared for the Technical Advisor, upon arrival.

Technical
Adviser
expertise
supported the
development
process

Adhering to timeframes was important, as the short-term Technical Advisers were scheduled to arrive in Solomon Islands, for a two-week period, to review the materials upon this established drafting completion date (Step 2). Interviews suggested that these materials were not available for some TAs upon arrival, leaving at least one Technical Adviser with little to do and another Technical Adviser with findings other tasks to complete.

When the materials were ready, the Technical Advisers edited the English grammar and proof-read the content, refining to ensure the content aligns with the learning outcomes and the activities are achievable for students at the specified year levels. This step in the process was considered valuable by the majority of PCDOs and Technical Advisers, as English was not the subject working group members' first language and the writers were not experts in curriculum design.

However, at least one PCDO believed that good practice curriculum design expertise is not necessary when adapting materials from other textbooks; the required knowledge, in this case, was the Solomon Islands context and the ability to adapt the materials to this context.

The iterative process delayed outputs

It was also necessary but not always possible that the materials were available to the Technical Adviser, when they arrived in country to do the work (c.f. full discussion 3.3.2)

...but there is some minor overlap between separate contracted parties The materials were then provided back to the PCDO, who discussed the changes made with the subject working group. The approval process was iterative, going 'to-and-fro' until agreement is reached between the curriculum experts and the subject working group. Although the process may delay outputs, two PCDOs believed it was necessary to ensure ownership and that the materials were fit for the Solomon Islands. The evidence of this approach was that it ensured that the materials are both sound in terms of local context and good practice curriculum design (as evidenced in Section 3.1 and 3.2). The inclusive process also allowed opportunities for the subject working group to learn from the curriculum expert, as understanding the rationale behind changes supported local capabilities. Once the materials were acceptable to the SWG and PCDO, these were then forwarded to the publisher to further develop the presentation of materials and edit the content.

There was some recognised overlap between Steps 2 and 3, particularly around editing English content. It is understood that the publisher receives the materials, edits the content a second time, and develops the presentation and layout of chapters. Efficiencies may be

gained here, if it were possible to encompass at least the English language editing roles, which was conducted by separate agencies (Technical Advisers and publishers), into one provider and contract. However, this would best not come at the expense of content and curriculum design expertise.

The number of available copies determines how many books schools receive

After reviewing, the publisher provided a small number of pages/chapters back to the PCDO who shared it with the subject working group for consideration if significant changes (or changes that are questionable) were suggested. Once approved by the CDD Director, the materials were published.

The decision making process, including multiple people and iterations, was understood to delay the process. Nevertheless, this process has the potential<sup>41</sup> to develop local writers (that is, the subject working group) and ensure a quality product.

Once printed, the materials were provided to the Education Resource Unit (Step 5), which distributed the materials to the schools. The Unit distributed 80 percent of their stock to the schools, holding 20 percent at the distribution centre should replacements be required. As it was not possible to provide a copy of materials for all students in the Solomon Islands, the number of copies were determined by the number of available copies (that is, 80 percent of publication) and the number of students in a school. During the classroom observations, one student book was always shared between approximately 2 to 3 students. Although an efficient use of available resource, it may not be effective (c.f. sections 3.1.2 and 3.2.2).

Overall, 5 of 7 users reported positive views of the efficient production and distribution process.

#### 3.3.2. Short-term Technical Advisers provided value-for-money.

As noted above, 573 support days were provided for the agreed contract from 2010 to 2014. This would equate to approximately 2.5 years of one full-time equivalent advisor. Comparatively, these support days spread across four separate Technical Advisers provided an opportunity for specialist skills across a range of subject areas (health, mathematics, social studies and science), whereas one full-time advisor may not be able to provide such a breadth of specialist skills and expertise. This was a valuable aspect of the short-term Technical Advisers that was universally valued by the contracted organisation (UniQuest), the advisors and the PCDOs. Subject area expertise is particularly important to retain the integrity of the curriculum and material content.

<sup>&</sup>lt;sup>41</sup> Subject working group members were not included in the evaluation.

Although short term inputs allow for expertise across a range of subjects, careful and coordinated project management is necessary to maximise limited time and learning opportunities

However, the modality used under this contract (short-term inputs) has some limitations in comparison with long-term advisors. Short-term Technical Advisers, particularly when these advisors are based overseas, are available for short predetermined periods of time (two weeks). The role dictates that these individuals "come and go", which requires careful time management. If the process includes many individuals and interdependent processes, such as shown above (Figure 7), the need to manage multiple and often competing deadlines is even greater. When this process works well, the Technical Adviser can be used effectively and the team can make the most of the individual's time. However, delays can occur, leaving the Technical Adviser in-country but not able to complete the required tasks.

The interviews and document review showed vastly different experiences with different combinations of Technical Advisers and PCDOs. When the process worked well, with the materials prepared for the PCDO upon arrival and the PCDO available to the Technical Adviser, both the PCDO and the Technical Adviser reported a positive experience. In particular, work was completed according to deadlines, and it was reported that local capability was developed. However, when materials weren't ready for review when the Technical Adviser arrived, deadlines were not achieved and sometimes the Technical Adviser was left without key tasks to complete.

Some communication is possible over email. However, such communications were believed to incur greater delays, as it is easier to discuss the points raised and the local context than it is to have an email conversation. Email communications also limits opportunities for the PCDOs and others to learn from the advisors, particularly on writing and/or curriculum design.

The support was an efficient provision of review, assisting the CDD to develop quality curriculum materials for Solomon Islands schools. However, there were some inefficiencies, including areas of low uptake of available Technical Adviser support and overlap with some editing tasks. To improve efficiencies, it is recommended that any future support is packaged, managing any potential overlap through a rationalised and coordinated set of activities, and taking advantage of any savings that can occur through contracting arrangements. It would also be important that those who are intended to benefit from any support buy-in to the method and approach prior to any help being provided to ensure uptake.

# 4. Evaluation Conclusions

Overall the support achieved the desired outputs and outcomes. It provided relevant assistance in light of the Solomon Islands context, and effectively improving access to, and the quality of, basic education in Solomon Islands.

Also, the overall worth of the overall support is evidenced in the widespread approval and use of the materials. User groups, with few exceptions, reacted positively to the materials, with reported greater understanding about learner-focused education because of the materials. Although users reported that the materials changed classroom delivery, this was not yet evidenced.

The direct support provided to PCDOs was more mixed. Some PCDOs reacted positively to the support, with others not understanding the value or role of the Technical Advisers. As a result, there was only some recognised development in knowledge and skills due to this support within the CDD. The need and/or appreciation for such support would be necessary to influence change.

This chapter justifies the overall summative judgements, using the evidence outlined in the Findings chapter.

#### The support was relevant



As criteria for success, it was necessary that the support be relevant to the New Zealand Aid Programme and the needs of the Solomon Islands governments and teachers. Success here was determined by whether the support prioritised and met these needs in most respects. The overall evidence suggests that the support was relevant, making very good links with the appropriate policies, and made these of high priority.

The support was directly relevant to the New Zealand government, aligning to the Millennium Development Goals and New Zealand's commitments to the Education for All Education Sector Framework. The support focused on specifically improving access to, and the quality of, basic education in Solomon Islands through the provision of quality materials.

Additionally, the support was focused on the Solomon Islands needs, as shown from the MDG monitoring report, and their priorities in that the government provides an adequate number of modern, relevant teaching and learning materials, facilities, equipment and materials. However, there remains a need for Solomon Island teachers to develop the ability to shift to an outcomes-based, learner-focused practice; although the curriculum materials encourage this shift, it is not adequate to ensure students have access to quality education based on the National Curriculum statement — an outcomes-based and learner-focused education.

The materials developed through the support provide a solid foundation for teaching effectively, reflecting the requirements of the

National Curriculum Statement. They provide adequate assistance to plan lessons around learning outcomes, and encourage teachers to shift towards learner focused education, and plan lessons with learning outcomes in mind. However, the materials did not connect learning progressions independent of the syllabus.

The suggested learning activities were found to be achievable and relevant in Solomon Islands classrooms, and the materials provide the content necessary for students to achieve the intended learning outcomes. It was also shown that the content is relevant to the Solomon Islands context, including indigenous culture, traditions, and practices.

Although the material content is relevant to the Solomon Islands needs, the cost of publishing the types of materials developed limits availability and subsequently, student learning within a country that cannot afford large print runs. This is a particular concern, as the number and types of materials published are currently not adequate to enable quality educational opportunities for current students in the Solomon Islands let alone to cater for the future, expected population growth.

#### The support was effective



It was also important that the support was effective, in particular, that the support delivered on the expected outputs and outcomes outlined in contracts. The collective evidence suggests that the support was effective overall, albeit with mixed results regarding the effectiveness of output delivery, capability development, and support for teachers and learners in the Solomon Islands.

The Technical Advisers delivered on most contracted outputs effectively, including assisting with both the curriculum materials contracted for but also additional materials that were requested for additional support by the CDD.

The Director and staff in the CDD utilised the Technical Advisers time. The Technical Advisers shared their knowledge and specific expertise around curriculum design and education. While the services were used extensively by some, extending local capability, the Technical Adviser was not always seen as useful or necessary for others. The capability development aspect of the contract presented on-going challenges for both the CDD and UniQuest which, in the end, were not overcome. This presents an opportunity lost, which could have benefited others who may have needed or been more willing to receive support.

The developed materials also delivered well across a range of indicators. The materials provide teachers with confidence, and include a range of activities and content which are effective for student learning. The materials, in particular the teacher books, also assist teachers to understand aspects of effective teaching and learning. The assessment activities and approach are also aligned well with some

good assessment practice.

However, the materials take what may be seen as a recipe book approach to teaching that is something of a contrast to the outcomes sought for students. However, they are designed for a teaching force that has had little formal training, is widely dispersed, and where schools do not appear to have a culture of professional learning. It makes sense that they provide detailed step-by-step guides. If a diligent teacher were to sit down carefully and read the teacher guide alongside the learner materials, they could certainly deliver lessons that were consistent with what could be called effective routine practice.

However, classroom practice did not always reflect the intent within the National Curriculum Statement, syllabi and materials. The shift to an outcomes-based, learner-focused curriculum requires more than that. Perhaps given the amount of detail they were required to impart and the potential to overwhelm the audience, or perhaps for some other reason, the materials provide limited information about why teachers should apply certain strategies. In particular, the series offer little or no guidance about how to share the learning outcomes with students or discuss progress with them. The presence of the learning outcomes in the learner books suggests that teachers are expected to discuss them with students, but this is not made explicit. Terms such as "scaffolding" are not introduced or explained and the term "modelling" is used in at least one of the series, but without an explanation of how to do so effectively.

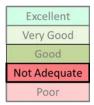
Although the books encourage teacher's delivery of learner-focused and outcomes based education, the materials cannot be seen as replacing professional learning. Teachers would require necessary content, theoretical and pedagogical knowledge to be effective teachers and use the materials to their fullest extent.

Finally, the curriculum materials content support students very effectively, offering many learning opportunities to meet the needs of students within the Solomon Islands. It does this through its variety of activities, which are relevant and appropriate; the material content is engaging and attractive, using colour, glossy pictures that reflect the peoples and regions of the Solomon Islands. Although not always the case, many student books also adequately present language at the right level for non-native English speakers, and provide layout and activities to support literacy.

However, the lack of available resources for all students to use both inside and outside of class limits students learning. Students are not able to use books during the whole class, and when these are available they are required to copy notes and instructions into secondary books rather than engaging in quality learning time. Additionally, the books are not available to students outside of class. These are grave limitations put on student learning, limiting access to quality

education.

#### The support was not efficient



As criteria for success, it was necessary that the support was efficient, representing good value and adherence to timelines. The overall evidence indicates that there is some minor scope for improvement in value for money, but poor adherence to the agreed deadlines, particularly for specific curriculum areas, due in part to the development processes.

The contract was delivered through short term advisors, whereby advisors would provide support across designated three-week periods. This modality allowed for expertise across a range of subjects from 2010 to 2014. Alternatively, one full time advisor delivering a similar number of hours, would provide specialist skills in one area across a shorter period of time. Short-term advisors are seen as providing value-for-money in this case, where specialist skills were required across a variety of subject areas.

The Technical Advisers delivered on most contracted outputs effectively. Although a number of outputs experienced delays, the challenges that contributed to these delays were worked around and the support was reprioritised to complete the outputs. This, however, speaks to the effectiveness.

Most steps used to produce these worthwhile materials, including the Technical Adviser support, were necessary to achieve the outcomes. Technical Advisers expertise was utilised, and was valuable. However, this expertise was not used to the fullest extent in some cases, with some advisors left to look for other things to do if materials were not prepared upon arrival. Additionally, when used solely for editorial purposes, there was some overlap between the work that the Technical Adviser did and what the publishing company also did, specifically language editing.

## 5. Lessons Learned

The support was provided between 2010 and 2014, specifically to develop local capability and assist with the development of quality materials to improve access to quality materials in Solomon Islands. There were a range of lessons and good practice that decision-makers can take from this provision of support. Some areas of good practice, which would be useful to learn from, are:

- An iterative and collaborative process, when done well, can result in many positive impacts
- The iterative process of developing materials was developed as a team of individuals, making up the Subject Working Group and taking advantage of an array of expertise. This team included the government official (PCDO), school staff (teachers), curriculum design experts (Technical Advisers). The process enabled teachers to trial the activities and/or chapters in classrooms before they were published, allowing the materials to be tested and adapted if necessary prior to publication.
- The iterative process of developing materials developed local capability of teachers and PCDOs, as they took part in the development, trialling and feedback loops of materials aimed at improving practice, developing skills around learner-focused and outcomes-based education.
- The development process included many decision making steps, which determined whether the materials were ready for the next stage. The subject working group, PCDOs and Technical Advisers were all part of this process, extending local capability further but also recognising the value of each individuals' contribution and expertise as valuable to the process.
- Collaborative efforts including a range of expertise successfully developed quality resources.
- Effective time management processes are important when working in teams, and are particularly important when the short term, time-specific support is planned.

Although there were a number of examples of good practice, there were also practices that hindered success. It would be important to learn from these going forward. These practices are:

- Direct support to where it will be most used
- Determining need and buy-in to support is pivotal to ensure engagement, as it agreeing on process. It was noted above that TAs were used by the PCDOs, but not as extensively as intended. A support person will be used only if there is a desire and (perceived) need. Such support can be more beneficial if the counterpart and Technical Adviser collectively buy-in to the approach and process.

Adopt project management practices which identify and control for dependencies

Communicate to improve awareness

- Management of iterative processes, including multiple individuals with subsequent responsibilities, is challenging, particularly when working with limited resources. Proactive project management processes in addition to regular engagement (minimally) is important to ensure timely delivery. Adopting project management practices with planning that takes into account the dependencies between factors and "monitors and controls" these factors (e.g. Prince2, PMBOK).
- Communication regarding the availability of the materials to the user groups (teachers), or alternatively awareness of the available materials, can be improved. As previously noted, some materials were delivered to schools, but teachers did not have access to the materials. It would be important to ensure teachers know about the materials and their availability so that they can begin using them.

## 6. Recommendations

Overall, the support provided has achieved across a range of expectations and contractual requirements. The Solomon Islands schools have curriculum materials available, which encourage teachers to deliver a learner-centred and outcomesfocused approach. The materials provide a solid foundation with which teaching and learning can improve.

Although the materials developed through the support provide a solid foundation for teaching using the principles of learner-focused and outcomes-based education, there are still significant gaps which would limit the systematic improvement in student achievement. These gaps currently exist in pedagogical practice, lack of available resources at all levels and across all subjects, inability for students to access the curriculum materials outside of the class, the capability to adapt the resources, to name a few.

The evaluation recommends:

- 6.1 MFAT modify support provided to the CDD: To help improve student achievement in the Solomon Islands, the evaluation recommends that support continue to be provided to the Solomon Islands Ministry of Education and Human Resource Development and CDD. However, it is recommended that the support be modified to match the current areas of greatest need which would have the greatest impact, and widest and most enduring benefits.
- **6.2. MFAT** and **MEHRD/CDD** identify the most appropriate support to support access to quality education: Although the materials developed through the support provide a solid foundation for teaching effectively, there are still significant gaps which would limit the systematic improvement in student achievement. It would be important to identify the support that would have the greatest impact in the Solomon Islands, as noted above. Although not a comprehensive list, some options that may be worthwhile are provided below.
- 6.3 MFAT ensure funding arrangements are efficiently and sustainably supporting goal success as a condition of funding: Aligning and coordinating streams of funding ensures a systematic approach to success, while managing any redundancies or overlapping work. Clarifying priorities in the funding arrangements would focus the activities on shared priorities and objectives. Contractual levers with the beneficiary country officials may be used to encourage the effectiveness, efficiency and relevance of the support towards improving student outcomes.
- 6.4 CDD develop processes and procedures to enable efficient and effective use of the support: If further support were to be provided to CDD, it would be important that the support is further enabled to achieve the joint objectives of the agencies, including the priorities of the New Zealand government to support access to quality education; and the needs and priorities of the Solomon Island government. The support provided was effective, but not very efficient. If future support is provided by the New Zealand Aid Programme, it would be important to learn from the experience and further support future success.

The evaluation recommends that MFAT and MEHRD/CDD take following steps to build upon the previous support provided, and further enable access to quality education in the Solomon Islands.

Table 15: Recommended implementation steps, including reference to findings (sections) supporting the recommendation

Step	Responsibility	Recommendation
1	MFAT	Develop a package of funding, bringing together different streams of funding and focusing this single source of financial assistance towards addressing a single goal through a set of rationalised activities (3.1.1).
2	MFAT	Ensure all funded activities are coordinated, outlining explicit roles and responsibilities, limiting any redundant activities and making the most use of each contractor (3.1.1) and any local individuals, who are intended to benefit from the support, buy-in to the approach prior to any assistance being provided (3.2.4, 3.2.9).
3	MFAT	As a condition of future support, ensure MEHRD/CDD enable success by addressing the short-comings raised in the evaluation report and building upon the strengths of the previous support provided. Some areas for further development are outlined in steps 5-8, below.
4	MFAT & MEHRD	Determine the areas of greatest support need that have the potential to impact on student achievement in the Solomon Islands (some options for future support are outlined below). Given the variety of need, each of which could support student achievement, conduct a cost-benefit analysis to determine the most appropriate and sustainable areas of support (c.f. section 6.4) that could effectively assist student achievement in the Solomon Islands in a cost-effective way (3.2.9).
5	MEHRD / CDD	Clearly outline roles and responsibilities for any recipients of support (3.2.4).
6	MEHRD / CDD	Ensure local individuals, who are intended to benefit from the support, buy-in to the method and approach prior to any assistance being provided (3.2.4).
7	MEHRD / CDD	Identify successful project management practices and templates, and share these amongst all relevant individuals (3.2.9).
8	MEHRD / CDD	Ensure literacy and numbers experts provide critical review of all materials during any further development stage (3.2.3).

#### Options for future support

The evaluation identified many potential options for future support throughout the evaluation report. The Ministry and MEHRD will need to explore how different options are responsive to the development needs in the Solomon Islands. Some options may have financial implications, but it is possible that additional funding may not be necessary.

Some future support options may focus on providing students greater access and opportunity to quality learning:

- 1. Ensure that the materials are accessible to students, and explore ways in which students can take full advantage of materials (inside and outside classroom time) and learning opportunity time in classes to improve achievement (3.1.2, 3.1.3,3.2.2, 3.2.9);
- 2. Further develop materials that are sustainable and relevant to the local context, while allowing all students to maximise learning time in class (e.g. printable workbooks for students, digital textbooks) (3.1.2); and/or

3. Identify opportunities to support awareness of the curriculum materials, enabling access and use of the materials within all classrooms in the Solomon Islands (3.2.9);

Other options for future support may centre on enabling teachers to put the theoretical concepts into practice:

- 4. Ensure syllabus documents, referenced materials, and curriculum materials are available to all teachers (3.2.1, 3.2.2);
- 5. Ensure curriculum materials are available across all year levels that allow a continuous and sequenced progression of learning throughout the years;
- 6. Adapt materials for teachers to further develop deeper pedagogical knowledge (3.1.2, 3.2.1). Any additional materials would be best delivered in conjunction with training; and/or
- 7. Provide in-service professional learning opportunities and training, to support all teachers in schools to effectively deliver an outcomes-based and learner focused education (c.f. 3.1.1, 3.2.5, 3.2.6, 3.2.7, 3.2.8,). Effective professional learning means that the written word about the new approach is reinforced by opportunities to talk, see, and try new strategies, and coaching. Professional learning would supplement and build upon the current curriculum materials, and ideally cover how to:
  - o deliver an outcomes-based education (3.1.1) and learner-centred curriculum (3.2.5), including learning outcomes and criteria of success;
  - o provide for "scaffolding" and "modelling" (3.1.3);
  - o apply a range of learner-focused strategies (3.1.3);
  - share and discuss learning outcomes with students, and how to monitor these together (3.1.3);
  - adapt teaching to particular students and places in the Solomon Islands (3.2.1);
  - use assessment for teaching practice and students' monitoring (3.2.7);
     and
  - o unpack technical language for students, drawing on the literature about second language acquisition (3.1.2).

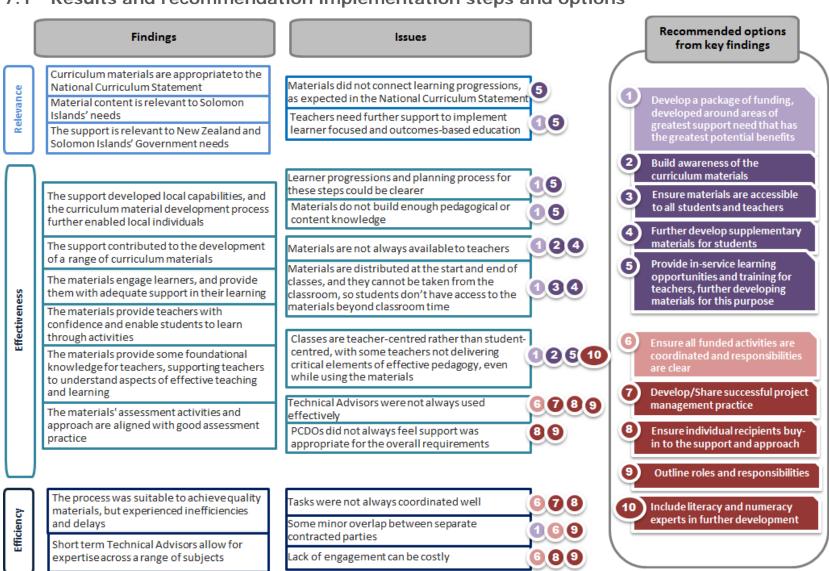
Professional learning would also ideally allow for:

- teachers to put the materials into practice, and view others doing so (3.1.2), showing alternative ways to for achieving the same outcomes or how teachers might try different approaches (3.2.6);
- o coaching opportunities (3.2.6); and
- o opportunities for professional discussion (3.1.2, 3.2.6).

These options should not be viewed as a comprehensive list of ranked needs in the Solomon Islands education system. Consideration of other appropriate forms of support would be an important consideration, particularly at Step 4 (Table 15).

# 7. Appendices

### 7.1 Results and recommendation implementation steps and options



## 7.2 Evaluation questions

The initial set of questions were provided within the Terms of Reference for the Evaluation of New Zealand Aid Programme support to the CDD of the Ministry of Education & Human Resources Development (ToR). These initial questions have been supplemented with those which surfaced through a literature review on the design of effective curriculum materials conducted at the initial phase of the current project.

The questions that the evaluation will seek to answer are numbered in the Table below.

Table 16: Evaluation criteria /themes, and evaluation questions

		•
	Eval	uation Questions
ant	1.	To what extent does support for the provision of quality curriculum and materials continue to be relevant to the New Zealand Aid Programme, Solomon Island Government/MEHRD priorities and teachers' needs?
Relevant	2.	To what extent are the curriculum materials appropriate to the purpose of the Solomon Islands' National Curriculum Statement?
	3.	To what extent are the content and teaching and learning activities used in the curriculum materials fit for purpose?
	4.	How well did UniQuest's support deliver on the expected outputs and outcomes outlined in their contracts, including the extent to which curricula and materials reflect educational best practice; are accessible; and, are used by teachers and meet demand for improved learning outcomes, including in literacy and numeracy?
Effective	5.	To what extent has support provided by Technical Advisers been utilised by the Director and staff in the CDD?
Effe	6.	Has there been any impact (and the extent of the impact) of the new curricula and accompanying materials on teachers' practice?
	7.	In what ways do the curriculum materials help all learners?
	8.	To what extent are the curriculum materials informed by research evidence about what makes effective teaching and learning practice?
4)	9.	In what ways do the curriculum materials help all teachers?
Effective	10.	What factors have affected the achievement or otherwise of the publication and use of high quality curriculum materials?
Eff	11.	What positive or negative long-term impacts have resulted from the development, publication and use of curriculum materials to date?
±	12.	Has value for money has been achieved in producing the curriculum materials?
Efficient	13.	What could be done differently to improve the efficient development, delivery and use of materials?
ns	14.	What are the lessons and good practice to date that would be useful to adopt if support was
Lessons	15.	funded going forward?  What practices (if any) need to change?

## 7.3 Evaluation Framework

Sub-question	Indicators	Source of information	Information collection method	
RELEVANCE: Are the curriculum curriculum statement?	materials appropriate to the purpo	ose of the Solomon	Island's National	
1. To what extent do the curriculum materials support the achievement of the key learning outcomes set out in the Solomon Islands National Curriculum Statement (NCS)?	Explicit reference to and alignment with the NCS learning outcomes     A perception that curriculum materials are aligned with the NCS outcomes	<ul> <li>Teacher guide</li> <li>Learner book</li> <li>UniQuest experts</li> <li>MEHRD staff</li> <li>Teachers</li> </ul>	Material review     Interview	
2. The resources connect to the progressions indicated in the relevant syllabi	Relevant learner progressions are referenced and connections made	Teacher guide     Learner book     Syllabi	Material review     Document     review	
3. The curriculum materials support the conceptual shift to an outcomes-based and learner-focused curriculum	The shift from a content-driven curriculum and a teacher transmission model is highlighted and explained  Learning outcomes are set out and explained  Strategies and learning activities support learning outcomes and learner focus	Learner book     Teacher guide	Material review	
	<ul> <li>A perception that curriculum materials support the shift in knowledge, understandings, and practice</li> <li>The shift from a content-driven curriculum and a teacher transmission model is explained, using evidence to support statements</li> </ul>	MEHRD staff     Teachers     School leaders	Interview	
4. The curriculum materials support teachers to plan lessons with learning outcomes in mind	Sample lesson plans are constructed around learning outcomes     Lesson outcomes are clearly linked to syllabus/NCS outcomes	Teacher guide	Material review     Classroom     observation	
EFFECTIVE: In what ways do the	curriculum materials support all lear	ners		
5. The curriculum materials provide a range of learning opportunities to	The content is rich and compelling  Most students are actively engaged with materials in the classroom	Students	Classroom     observation	
meet the needs of all learners (diverse in terms of skills, culture, and motivations)	Teachers can provide examples of how the materials have helped them to develop learning opportunities that met a range of learner needs	Teachers	Interview	
	Range of activities available for different students in the Solomon Islands	MEHRD     Teachers     UniQuest staff     Learner books     Teacher guides	Interviews     Material review	
6. The curriculum materials support teachers to build on prior learning and toward future learning	<ul> <li>Learner progressions indicated</li> <li>Materials support teachers to notice and record evidence of learning and to use this to plan next steps</li> </ul>	<ul><li>Learner books</li><li>Teacher guides</li><li>Interviews</li></ul>	Material review     Teachers	

Sub-question	Indicators	Source of information	Information collection method
	<ul> <li>Materials prompt links to learners' prior knowledge and to learning in other contexts (e.g., other learning areas and "real life")</li> </ul>	<ul><li>Learner books</li><li>Teacher guides</li></ul>	Material review
	<ul> <li>Teachers can talk about student learning and progress, using language from the curriculum materials</li> </ul>	• Teacher	Interviews
7. The curriculum materials provide learning that is relevant for	<ul> <li>Content incorporates examples and activities related to everyday life in the Solomon Islands</li> </ul>	<ul><li>Teacher guide</li><li>Learner books</li></ul>	Material review
students who do not continue beyond basic education	<ul> <li>Materials convey a strengths-based views of content, examples and activities relating to everyday life in the Solomon Islands</li> </ul>	MEHRD     Teacher	• Interviews
EFFECTIVE: To what extent are the effective teaching and learning properties.	ne curriculum materials informed by ractice?	research evidence	about what makes
8. Teachers and school leaders are	<ul> <li>Examples promote the use of local people and available resources</li> </ul>	<ul><li>Teacher guide</li><li>Learner books</li></ul>	Material review
encouraged to take an active, problem-solving approach to implementing the curriculum in the local context	Learning examples using local resources	Teacher practice	Classroom     observation
9. The curriculum materials set a clear purpose for learning	<ul> <li>Clear articulation of long-term purpose with reference (where possible) to the outcomes and to how the learning will enable learners to address everyday problems</li> </ul>	<ul><li>Learner books</li><li>Teacher guide</li></ul>	Material review
	<ul> <li>Clear understanding of purpose and why it is valuable for learners</li> </ul>	Teacher	Interview
10. The curriculum materials provide opportunities for all students to achieve the learning	<ul> <li>A variety of learning opportunities are suggested</li> <li>The learning opportunities are aligned with the intended learning outcomes</li> </ul>	<ul><li>Learner books</li><li>Teacher guide</li><li>Classroom</li></ul>	Material review     Classroom     observation
outcome/s	Positive views about opportunities to achieve learning outcomes	Teachers	Interviews
11. The curriculum materials contain the critical elements of the pedagogy recommended in the Solomon Islands (i.e., problemposing, learner-centred, use of multiple intelligence)	<ul> <li>Lessons begin with determining what students already know</li> <li>Activities to prompt inquiry (e.g., problem-posing experiments in science, excursions, field work)</li> <li>Group work (e.g., group research, role play, drama)</li> <li>Activities to prompt thoughtful discussion (e.g., open questions rather than closed questions, brain storming, peer teaching)</li> <li>Positive connections made or encouraged to students' lives, identities, and aspirations</li> <li>Activities to prompt self-reflection and self-monitoring (e.g., discussion re-</li> </ul>	<ul> <li>Learner books</li> <li>Teacher guide</li> <li>Classroom</li> </ul>	Material review     Classroom     observation

Sub-question	Indicators	Source of information	Information collection method
12. The suggested assessment activities are aligned with evidence about good assessment practice and the learning outcomes contained in the National Curriculum Statement	Strategies to promote assessment for learning  Learning outcomes clear to students Students able to monitor learning  Positive evidence of above evidenced through teacher language  Teachers using assessment as a diagnostic tool  Teachers/students using assessment information for feedback and feed forward  Teachers using assessment information to adjust practice	Teacher guide Learner books Classroom practice Teachers MERHD Classroom	Material review     Classroom     observation  Interviews
13. Teacher guides support a reporting regime that make learner progress transparent and ensure teachers are accountable to learners, families, and other stakeholders in the education system	<ul> <li>Teacher guides explain the purpose and process of reporting</li> <li>Teacher guides contain an example of a reporting template</li> <li>Teachers can explain how the materials have helped improve reporting practice</li> </ul>	<ul><li>Teacher guide</li><li>Teachers</li></ul>	Material review     Interviews
RELEVANCE: To what extent are materials fit for purpose?	the content and teaching and learn	ning activities used	in the curriculum
14. The suggested learning activities are achievable and relevant in Solomon Islands classrooms	<ul> <li>Activities are relevant to the Solomon Islands</li> <li>Content takes into account local resources</li> <li>A perception that the materials incorporate sufficient content and activities that are directly relevant to the Solomon Islands</li> </ul>	Teacher guide Learner books Classroom practice MEHRD School leaders Teachers	Material review     Classroom     observation      Interviews
15. The curriculum materials	Content caters for all students, including mixed levels of ability	Teacher guides     Learner books	Material review
provide the content necessary for students to achieve the intended learning outcomes	Students are able to achieve learning outcomes     A perception that the materials provide the content necessary to enable students' to achieve the intended learning outcomes	<ul><li>Classroom</li><li>Teachers</li><li>MEHRD</li><li>UNIQUEST</li><li>classroom</li></ul>	classroom observation     interviews     classroom observation
16. The learner books and teacher guides are aligned in terms of learning outcomes, content and teaching and learning activities	It is easy for teachers to navigate between the teacher and student resources and they convey the same essential theories, content and activities	Teacher guide     Learner books     Teachers	Material review     Interviews
The content contained in the curriculum materials is accurate, coherent and well organised	<ul> <li>Users can understand and use the materials easily</li> <li>Users and experts believe content is accurate and clear</li> </ul>	MEHRD     Teachers     School leaders     Pearson     UniQuest	Interview
	<ul> <li>Content is accurate and clear</li> <li>The language is clear for all users</li> </ul>	Teacher guides     Learner books	Material review

Sub-question	Indicators	Source of information	Information collection method	
18. The c relevant to the 18. Solomon Islands context, including	A perception that a range of users are able to relate easily to the content	MEHRD     Teachers	Interviews	
indigenous culture, traditions, and practices	<ul> <li>Materials provide a variety of content reflective of different user groups in Solomon Islands</li> </ul>	Learner books     Teacher guides	Material review	
	A variety of users can relate easily to the content	Classroom	• classroom observation	
Effective: In what ways do the cu	rriculum materials support all teach			
19. Pedagogical knowledge: The	<ul><li>Explanations provided</li><li>Extended examples provided</li></ul>	Teacher guides	Material review	
curriculum materials support teachers to understand the new pedagogy, to see what it looks like, and to put it into action (i.e., are they educative curriculum materials)	<ul> <li>Explanations clear to users</li> <li>Stakeholders talk positively about the pedagogical knowledge conveyed in the materials</li> <li>Teachers can talk about changes they have made to their practice as a consequence of the materials</li> <li>Teachers can talk about how they have adapted ideas to their particular context/students</li> </ul>	<ul><li>Teachers</li><li>UNIQUEST</li><li>MEHRD</li></ul>	Interview	
20. Content knowledge: The curriculum materials support teacher content knowledge.	<ul> <li>The materials build teacher content knowledge that goes above and beyond what is required for the students so the teachers can explain concepts and respond effectively to students</li> <li>Teachers talk positively about the impact of the materials on their content knowledge</li> </ul>	Teacher guides     Teachers	Material review     Interviews	
21. Pedagogical content knowledge	The materials build knowledge at the intersection between content and pedagogical knowledge (e.g. the specific knowledge necessary to be a teacher of science)  Teachers can talk about specific strategies they have applied in particular lessons (e.g. a problem-posing approach in science)	<ul><li>Teacher guides</li><li>Teachers</li></ul>	Material review     Interviews	
22. The curriculum materials support teachers themselves to take a "problem-posing approach to education" that positions them	Guides contain elements to prompt teacher inquiry into the impact of teaching on student learning (e.g., reflective questions, prompts to engage with colleagues))	Teacher guides	Material review	
as learners alongside their students	Stakeholders talk positively about the support curriculum materials provide to re-position teachers as learners	MEHRD     UNIQUEST     Teachers	Interviews	

RELEVANT: Does the support for the provision of quality curriculum and materials continue to be relevant (to the New Zealand Aid Programme, Solomon Island Government / MEHRD priorities and teacher's needs)?

Sub-question	Indicators  • Positive views about the relevance of	Source of information  • MFAT staff	Information collection method Interviews
23. The support for the provision of quality curriculum and materials continues to be relevant to the Aid Programme, SIG/MEHRD priorities and teachers needs	support for the provision of curriculum and materials	MEHRD     teachers	Titletviews
outlined in their contracts, include	UniQuest's support delivered on t ding the extent to which curricula a used by teaching and meet deman	nd materials reflec	t educational best
24.UniQuest's support delivered on the expected outputs and outcomes outlined in their contracts – the extent to which curricula and materials reflect educational best practice (above)	Positive indicators evidenced, as above	Summary above	Summary above
25. The extent to which curricula and materials are accessible	<ul> <li>Users are aware of materials</li> <li>Users know how to access materials</li> <li>Users can access materials</li> <li>Users access materials</li> </ul>	School leaders     Teachers     MEHRD     Distribution     statistics	Interviews     Data review
26. The curricula and materials are used by teachers	Users use materials	School leaders     Teachers     MEHRD	Interviews     Classroom     observation
27. The curricula and materials meet the demands for improved literacy and numeracy outcomes	Users report curricula and materials meet the demands	School leaders     Teachers     MEHRD	Interviews
28. The support provided by TA's has/ is being utilised by the Director and staff in the CDD	Users use the support	MEHRD	Interviews
29. The extent of the impact of the new curricula and accompanying materials on teachers' practice	Positive reports of materials impact on teacher practice	School leaders     Teachers     MEHRD	Interviews
EFFICIENCY: Whether value for n	noney has been achieved in produci	ng the curriculum m	aterials
30. Value for money has been achieved in materials using the optimal allocation of resources	Description and positive views of efficient production and distribution processes	UNIQUEST     Pearson, if     necessary     MEHRD	Interviews
	<ul> <li>Users value materials and support</li> <li>Production and distribution process steps, as described in a process map, is considered ideal</li> <li>Distribution methods are viewed appropriate to reach target audiences</li> <li>Products are believed optimal for achievement (few / no unnecessary/unuseful products)</li> </ul>	<ul><li>Teachers</li><li>School leaders</li><li>MEHRD</li><li>UniQuest</li></ul>	Interviews

Sub-question	Indicators	Source of information	Information collection method
	<ul> <li>Costs are believed optimal for desired value (no alternatives are considered appropriate)</li> </ul>	UniQuest	● Debrief
EFFECTIVE: What factors have affected the achievement or otherwise of the publication and use of high quality curriculum materials	N/A	<ul><li>UniQuest</li><li>MEHRD</li><li>School leaders</li><li>Teachers</li></ul>	<ul> <li>Interviews</li> </ul>
EFFECTIVE: What positive or negative long-term impacts have results from the development	N/A	UniQuest     MEHRD     School leaders     Teachers	• Interviews
EFFICIENCY: What could be done differently to improve the efficient development, delivery and use of materials?	N/A	UniQuest     MEHRD     School leaders     Teachers	• Interviews
LESSONS LEARNED: What are the lessons and good practices to date that would be useful to adopt if support was funded going forward	N/A	All data collected	As above
LESSONS LEARNED: What practices (if any) need to change	N/A	All data collected	As above

# 7.4 Methods, sample and analysis used for the evaluation

Method	Sample	Information sources	Analysis
Document review	ı		
Relevant Solomon Islands education documents	100% 5 documents	<ul> <li>Solomon Islands National Curriculum statement (1)</li> <li>Relevant syllabi for four subject areas (4)</li> </ul>	<ul> <li>Information reviewed for relevant themes and desired outcomes</li> </ul>
Project management documents produced by UniQuest for MFAT	100% 23 documents	<ul> <li>Inception report (1)</li> <li>Contract and variations with UniQuest (6)</li> <li>Milestone and progress reports (10)</li> <li>UniQuest Final report (1)</li> <li>Subject and overall progress reports (5)</li> </ul>	<ul> <li>Data compared across reports for anticipated and actual completion dates for agreed outputs</li> <li>Comparison of agreed vs. actual outputs</li> </ul>
Production and d	istribution statistics		
Production and distribution statistics	12 documents	Production statistics provided in:  UniQuest contract, variations and final report (6)  Publication year end summary receipts (Dec 2013, Dec 2014) Summary Invoice (2)  Delivery receipts (receipt of materials received by schools) (4)	Descriptive statistics, where available
Material review			
Materials produced with the assistance of the Technical Advisers	35%  14 of the 40 materials supported	Both a teacher and learner book for each:  Social studies Year 1 Social Studies Year 6 Health Education Year 5 Health Education Year 7 Science Year 1 Science Year 3 Math Year 7	<ul> <li>Data collated and rated (not present, present, exemplary) against relevant performance indicators</li> <li>Rationale for judgement scores summarised into themes</li> <li>Judgement scores moderated using two independent evaluators</li> <li>Quantified judgement scores collated and described</li> </ul>

Method	Sample	Information sources	Analysis		
Classroom observations					
Classrooms using the materials produced	13% (5 of the 40 materials produced)	Classrooms providing education for years 4-7 students in:  Health Education (1) Social studies (2) Science (1) Math (1)	As above		
Interviews/ sma	II group discussion				
School staff	11 staff members	<ul> <li>School leaders whose schools have received the materials (4)</li> <li>Teachers who use/have used the produced curriculum materials, across subjects and year levels (7)</li> </ul>	<ul> <li>Data collated and rated against relevant performance indicators</li> <li>Rationale for judgement scores summarised into themes</li> <li>Judgement scores moderated using</li> </ul>		
Curriculum Development Division	80% 3 of the 4 staff involved	<ul> <li>Principal Curriculum         Development officers (3)</li> <li>Chief Curriculum         Development Officer (1)*         (also a PCDO)</li> </ul>	two independent evaluators  Quantified judgements collated and described		
MEHRD staff	3 staff members	<ul> <li>MEHRD Under Secretary National Services (1)</li> <li>Literacy Adviser (1)</li> <li>Education Resource Unit office manager (1)</li> </ul>			
UniQuest staff	66% 4 of the 6 staff involved	<ul> <li>Technical Advisers (2)</li> <li>Project managers (2)</li> </ul>			

Method	Sample	Information sources	Analysis
New Zealand High Commission	3 staff members	<ul> <li>New Zealand High         Commission (previous)         education programme         coordinator (1)</li> <li>Current education         development programme         coordinator/staff (2)</li> </ul>	

## 7.5 Summary scores against indicators

A rubric was developed to help the evaluation team make judgements against each indicator. The evaluation team noted one of three categories against the indicators:

	Not present	Present	Exemplary
Indicator	No indicator present, or	The indicator is present	The indicator is clear,
	present to a limited		well-defined or
	extent		exemplified
Evaluative	Not Achieved	Achieved	Achieved: Exemplary
judgement			

It was not always possible for a judgment to be made against the indicators. This occurred when, for example, the evaluators did not observe a full class period from start to finish; when there was limited time for interviews; or if it was not clear to the evaluation team if the respondent understood the question (language barrier). In such cases, the indicator was not rated, and therefore some overall results reflect smaller samples than the total included. The judgements were made throughout the data collection period, at the end of each day of data gathering. The two evaluators discussed their independent views, moderating and justifying the evaluative rating.

# 7.6 Quality Standards (adapted from those set out by the Aid Programme)

Criteria	Poor	Not adequate	Good	Very good	Excellent
Relevant	Needs and policy linkages were either low priority or not a priority; the support was flawed and/or the setting was not right at the time	Needs and policy linkages were not a high priority; there was something wrong with the support or setting	Needs and policy linkages appropriately identified and are prioritised; and the support is in most respects has meet them	Needs and policy linkages appropriately identified, and mostly of high priority; and the support is in most respects has met them	Needs and policy linkages appropriately identified and high priority; and the support is in all respects has met them
Effective	Few or no outputs were achieved or advanced. Serious unresolved challenges with no plan to address them.	Only some planned outputs were achieved. Some, but not all, unforeseen challenges were overcome.	Most outputs achieved as planned with a reasonable explanation of variance and/or a plan to address this. Unforeseen challenges largely overcome (i.e. not quite as good as planned, but still positive)	Planned outputs achieved Most unforeseen challenges were overcome	Planned outputs achieved better than originally planned in terms of timing, quality or/or quantity. Planned outcomes achieved and there were additional unplanned positive outcomes
Efficient	Money wasted; wasted; big saving could have been made for similar results. At worst, significant wastage, possibly fraud or corruption. Poor adherence to timeline.	Scope for improvement in value for money. Poor adherence to timeline.	Some scope for improvement in value for money - minor variations required. Mostly good adherence to timeline of outputs.	Value for money met normal expectations. Good adherence to timeline of outputs.	Value for money exceeded normal expectations. Timeliness of outputs exceeded expectations.