# Making the Switch from "Assessment for Ranking" Towards 'Assessment for Learning"; The Challenges Facing The Small Island States of the Pacific

By

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# Making the Switch from "Assessment for Ranking" Towards "Assessment for Learning"; The Challenges Facing the Small Island States of the Pacific

### 1. Introduction

Changing the way we assess the educational achievements of our children is not an easy undertaking. While there may be good grounds for changing our assessment philosophies and hence assessment approaches, it is often difficult for such changes to be accepted unless the alternative to be put in place provides far more useful information about student achievements than the current system.

In recent years there has been significant changes not only in the emphasis and focus in the assessment process but also in the way assessment information is being interpreted and used. The global shift where assessment is increasingly being perceived as part and parcel of teaching and learning has brought significant changes not only in the way in which the assessment process is conducted but also in how the results are being interpreted and used.

The notion of "assessment for learning" (AfL), with emphasis on the use of the assessment information to improve learning, is becoming more prominent and accepted as the way forward in efforts to improve the quality of education. As an information gathering process, assessment is only as good as the instruments used and how the information gathered is used. An understanding of the process is necessary if assessment is to have a significant impact in any effort to improve the quality of education.

Assessment information has been used widely in other parts of the world to identify problem areas in the education system. It has helped in identifying problems in such areas as literacy and numeracy as well as establishing student achievement level compared to curriculum expectations in such areas. Such use of the information contributes more towards the improvement of the quality of education than the current situation with its emphasis on "assessment for ranking" (AfR).

Decision-makers need to have a clear insight of the assessment process any change is likely to be accepted. The changes recommended are often based on economic, social, demographic or political considerations rather than educational ones. Where selection is not the key issue in the assessment, a broad approach is preferred. But where selection is the predominant factor, one would expect a narrow approach to the assessment process (Boyer & Ewell, 1988; McGaw, 1987).

Attempts to change the assessment practices in Pacific Island Countries (PICs) have only become evident in recent years. Such attempts indicate the realization by the education authorities of the potential for assessment to improve the quality of education. Such attempts have been hampered either by the reluctance to change, or by outdated policies in place or by the non-conducive environment in which assessment operates. Recommended changes often manifest themselves as economic, social, demographic or political considerations rather than educational ones. Consequently, what is eventually adopted is what the system can afford rather than what is good for the system.

One of the challenges facing the education systems in PICs is trying to introduce an assessment system that not only assesses the range of outcomes in the curriculum but also caters for the diverse and often competing demands of the various stakeholders and users of the information. In referring to the situation in schools, Jones and Bray (1986) assert that;

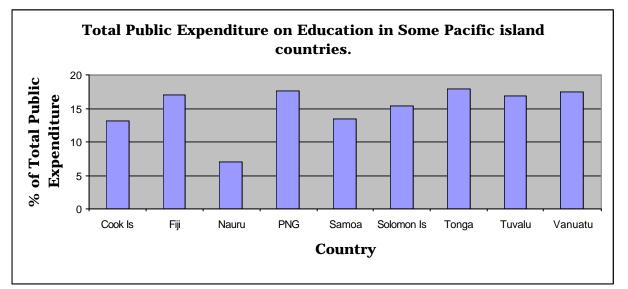
"...the greatest challenge to policy-makers in schools is to achieve coherent whole-school policies while maintaining flexibility; to cater for differing needs of different subjects, differing classes and differing age groups and ability levels, while avoiding fragmentation". (p.8)

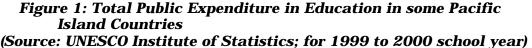
While the views expressed above may appear far-fetched in as far as the current situation in PICs are concerned, it provides an indication of what assessment should aim for and what any development in the area should try to achieve.

# 2. Rationale for change

The 1948 United Nation's Universal Declaration of Human Rights stipulates that education is a fundamental right. The 1990 Convention on the Right of the Child recognised education as a condition for social development (ADB, 2003). Within the last two decades, education has been accepted as a key sector in economic development through its influence on human resource development. The World Summit on Education for All (Jomtien Framework for Action, 2000), the World Education Forum (Dakar Framework for Action, 2000) and the UN Millennium Summit (Millennium Development Goals, 2000) all recognised the importance of education and the need to improve its quality in developing nations. The Forum Islands Education Minister's Basic Education Action Plan (2001) among other things emphasised the need to improve the quality of basic education in all of its member states.

The increasing international and regional commitment to education reflects the importance of education as a determinant in the welfare of every nation. Because of its importance, education takes up a significant proportion of total public expenditure each year in many countries including PICs, and is often at the centre of policy discussions relating to human resource development. Figure 1 gives the total public expenditure in education in some PICs.





In recent decades we have seen a gradual change in the delivery of education from one focusing on access to basic education to one that focuses on improving quality. However, the differing social, political and economic circumstances among PICs have resulted in the disparity in the delivery of education. While some countries are still grappling with the issue of access to basic education, some have achieved universal basic education and are now focusing on quality improvement. For those that are now starting to focus on quality-related goals of both the Jomtien and Dakar Conventions of 2000, many are not sure what quality education is, let alone how to improve the quality of education.

Although quality is one of the most talked about issues in education, defining "what constitutes quality" is not easy (UNESCO, 2002). Consequently countries adopt their own ideas, and hence indicators, for measuring and monitoring the quality or changes in the quality of their education programmes. This is one of the biggest challenge facing education in PICs today; what do we consider as quality education? What needs to be done to improve education quality? How can we monitor changes in the quality of education over time? While there may not be any straightforward answers to these questions, they need to be seriously considered and education authorities need to put in place strategies for improving the quality of education in their respective country.

The intention of this paper is to look at the situation in PICs today and the efforts of the South Pacific Board for Educational Assessment (SPBEA) to encourage PICs to use the information that assessment produces as a means for improving student learning. While huge efforts have been made to improve the various conditions for improving the quality of education such as improving the facilities, the qualifications of teachers, etc. real improvement in quality can only take place if such efforts translate to improvement in student learning. Because of the complexities associated with the issue of quality as well as the economies of scale, PICs are encouraged to work close with each other as well as with the regional and international education communities in their efforts to improve the quality of education.

# 3. Current Situation in PICs.

Despite the concerns about the quality of education in PICs, and the commitment of international and regional educational communities towards improving education quality, the Pacific remains a vulnerable regions in the world in as far as the quality of education is concerned. Some of the international education communities such as UNESCO, World Bank, ADB, etc refer to the situation in the Pacific as "an economic, social and political time bomb" because of the large proportion of youths that have gone through the education system yet they are either unemployed or underemployed.

In a number of PICs access to primary education is no longer a priority as they have achieved universal primary education. However, "lack of appropriate education and training that realistically reflects and links into further training and or employment/selfemployment opportunities in the formal or informal sectors" is now the main issue of concern leading to the youth problems. While most PICs have made huge strides in their effort to improve education quality, there is growing concern amongst the regional and international education communities that all is not well. Available data show very compellingly that large numbers of school-leavers lack basic life skills to secure a job, or to make a living for themselves.

The international community has taken steps to address the problems associated with the quality of education in under-developed and developing nations. During the Conference on Education for All (EFA) in Jomtien, Thailand in 1990, Education was affirmed as key to development. The 155 nations that participated in the conference, including all of the PICS, were urged to intensify their efforts to address the basic learning needs of all their citizens. A Framework for Action to meet these commitments was approved and with support from the Pacific UNESCO Regional Office, all countries made a commitment to work towards achieving the goals of the Education For All (EFA) initiative. Each country has developed its own EFA Action Plan. Aspects of the EFA goals that were highlighted as relevant to the region include those relating to; quality of formal basic education provision including measurable learning outcomes in literacy, numeracy and life -skill areas; equity and delivery of appropriate basic education programs, with a focus on marginalized/vulnerable and 'at-risk' groups; and community/parent education programs.

Countries that participated at the World Education Forum held in Dakar, Senegal in 2000 committed themselves to attaining certain goals that would ensure significant improvement in the quality of education. One of these goals relates to the improvement of "all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (ADB, 2003).

During the first meeting of the Pacific Forum Islands Ministers of Education held in Auckland in May 2001, ministers reaffirmed their commitment to the Dakar 2000 EFA Framework for Action and noted the actions taken so far by Forum Island Countries at the national level. A Vision Statement for the Pacific Basic Education Action Plan (BEAP) was adopted and the meeting concluded that basic education is the fundamental building block for economic and social development, and that a mechanism should be in place to ensure that the Pacific Vision and Strategies for Basic Education were actively pursued.

With the goal for the BEAP focusing on achieving "universal and equitable educational participation and achievement, and to ensure access and equity and improve quality and outcomes", ministers identified specific areas that the BEAP needs to consider. These include Education Policies and Planning; Improving Quality in Basic Education; Financing Education; Non-Formal Education; Gender and Equity Issues in Education; Teaching of Governance and Civics; Technical and Vocational Education and Training (TVET); as well as Developing Partnerships.

While the patterns of participation and achievement in education vary among PICs, many of the issues of concern are common, with differences more a question of scale, priority in a particular context, or the cultural specifics of the context. In spite of the differences, most PICs share the common objective of provision of quality relevant basic education, and many of the constraining factors are common; including economic constraints, geographic spread and numbers of school age populations, difficulties in resourcing isolated remote communities especially, teacher shortages and quality of the teacher training experience, mismatch between education outcomes and skill requirements for a diverse range of post school options, etc (UNDP, 1999).

In spite of the efforts and commitments by the international and regional communities towards education, there is no doubt that the quality of education in PICs is a concern and countries have been encouraged to take initiatives to identify key problem areas in their system and define realistic strategies to address such problems. At the regional level, efforts aimed at identifying the literacy and numeracy levels at the end of Years 4 and 6 (PILLS) as well as the various efforts by SPBEA for the same purpose, are encouraged. Data collected from such efforts however need to be thoroughly analysed and results seriously considered with appropriate follow-up actions put in place.

Published figures of literacy for PICs such as those shown in Figure 2, are relatively high and often misleading as this may not reflect the true situation in each country. However, the true level of literacy and numeracy depends on ones definition of the two concepts. There is a concern that despite the high level of literacy and numeracy published, hidden illiteracy is high resulting in a significant proportion of children completing school but lacking the basic literacy and numeracy skills. Figure 2 gives the published literacy figures for 15 years and over for some of the PICs.

Pacific Developing Member Countries	Literacy Rates (%) for 2000 (15 years and over)						
Γ	Female	Male	<b>Overall Rate</b>				
Cook Islands	94	93 (1998)	94				
Fiji Islands	91	95	93				
Kiribati	91	94(1998)	93				
Marshall Islands	97	97 (1999)	97				
FSM	66	77	72				
Nauru	95	95 (1998)	95				
Papua New Guinea	57	71	64				
Samoa	98	99	99				
Solomon Is	100	100	100				
Tonga	99	99 (1998)	99				
Tuvalu	95	95 (1998)	95				
Vanuatu	30	37 (1998)	34				

# Figure 2: Literacy Rates for 15 years and over for PICs (Source: ADB, 2003)

The Pacific Islands Literacy Levels (PILLs) test introduced as part of the Basic Education Life Skills (BELS) project in 1994 showed that the literacy and numeracy situation in many PICs was not as bright as originally reported. Figures from the PILL tests bear no resemblance on those shown in Figure 2. One must be cautious however in drawing conclusions from such results as the two sets of data were based on different definitions of literacy (and numeracy in the case of PILLs). Figure 3 shows the literacy and numeracy situation in some of the countries in the region at the end of Year 4 in primary based on the definition of literacy and numeracy given.

<u>Literacy</u> "is the confident, appropriate and accurate use of spoken and written language for the wide variety of personal, public and creative uses demanded by the society in which the user lives.

<u>Numeracy</u> " is the confident, appropriate and accurate use of number and the language of mathematics for the wide variety of personal and public uses demanded by the society in which the user lives. (PILLs, 1992)

A comparison of the literacy and numeracy levels at the end of Year 4 based on the PILL results at the beginning and at the end of the PILLs Project (1994 and 1998/2000) revealed no significant improvement over the 5 to 6 year period despite the effort and the resources put in under the BELS programme. Figure 3 shows that about a third of the Year 4 students in countries who took part in the test at the end of the year (between 1998 and 2000) achieved little of the basic literacy and numeracy skills expected at the end of Year 4 and were therefore considered to be "at risk" (AR) with less than 10% acquiring the required literacy and numeracy skills expected at the end of Year 4 (L5). More importantly, no improvement was detected over the 4 to 5 year period despite the

efforts and resources put in towards improving the situation. If this is any indication of the situation in PICs now, one should be alarmed as it shows that the majority of the primary school students that proceed from one level to another are not yet ready for the challenges at the next level.

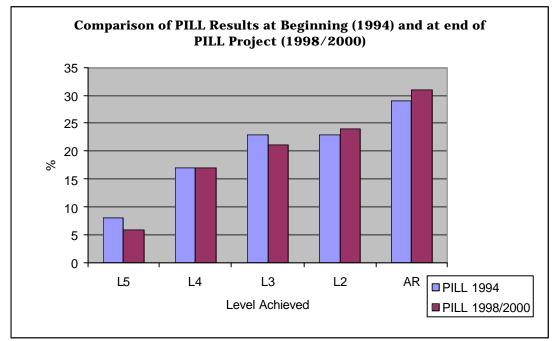


Figure 3: Comparison of the overall literacy and numeracy situation for SPBEA member countries at the beginning (1994) and at the end (1998/2000) of the PILLs Project.

Experiences with the PILL tests support the general beliefs that many of the students in PICs leave school with little life skills. Unfortunately such information is not readily available to policy and decision makers. Where such information is available, it is not taken seriously and appropriate follow up actions are often not forthcoming. If the results shown by the PILL tests, as well as the general beliefs about the situation in schools are true, then the issue of student's readiness for studies at the next level is one that needs urgent consideration. Each country must implement strategies that would address this problem if the quality of learning and hence education in our countries are to improve.

# 4. Linking Assessment to Education Quality

Although the quality of education in PICs has been on the agenda on international and regional educational agencies for sometimes, it has not been given sufficient attention at the national level. This is due in part to the preoccupation of countries with the issue of access and the general lack of understanding by the education authorities of what constitutes quality education. While few topics within the education policy circles receive as much attention as that of quality, achieving quality in education is a totally different story.

Attempts to use assessment to monitor quality of education can only be successful if we are sure of what quality is, and its characteristics clearly identified. In the last decade the information needs of the educational community, both within the region and internationally, have grown. More students with more diverse needs are now remaining in

school, public interest and involvement in education has intensified, and with this trend comes the demand for greater accountability in education.

The need to know how well students are doing, how well schools and the education system are doing in achieving the anticipated outcomes needs to be given priority. Results of student achievements need to be considered in tandem with information on the environment in which the student is learning in order to provide a complete picture of the various factors that influence quality. Educational Indicators need to be identified and agreed upon before quality related information is gathered and sensibly analyzed. However this is not an easy task because PICs have had less experience with the issue of quality in their education system. Unlike other social and economic indicators such as the consumer price index, the unemployment rate in economics, and mortality rates, etc. which have played a key role in public policy decisions for a long time, their use is widely known and accepted when compared to education quality indicators.

While both the international as well as the regional educational communities have shown interests in efforts to monitor education quality in PICs, they are aware of the challenges associated with such initiative. In its effort to define the "characteristics of quality" in education, the ADB (2002) included the following components;

- teaching methodologies (designed to encourage independent thinking),
- teachers (capable, motivated and well trained)
- curriculum (appropriate and well designed)
- learning materials (effective including textbooks)
- learning environment (safe and well maintained)
- examination system (valid and reliable)
- school leadership including supervision (effective)
- direct instructional time ( ample)
- financing (adequate)
- organizational structure and support (effective)

The growing concerns about the quality of education in PICs has led to the attempt to include other measures to describe a detailed profile of the students' learning context and what society receives for its investment in education. This approach however requires a new educational audit initiative that is not only comprehensive but also includes inputs, context, processes and results so that educators have up-to-date and accurate data both to identify areas for improvement and to credibly demonstrate system quality and productivity.

Student achievement has been considered as a key indicator of educational quality although student performances on high-stake examinations have been the subject of much public scrutiny in many PICs. Assessment provides the mechanism for monitoring student achievements over time although such information can only be interpreted meaningfully in the context of the system that produced them and the purposes accorded to such assessments. To understand and evaluate the overall quality of education in PICs one needs quantitative measures such as test scores in the high-stake examinations, but also a more vivid picture of the unique and complex character of the educational system in each country. Many factors influence student learning, some of which are outside the control of the school. Such factors must not only be identified and measured, but also addressed through educational programs designed to maximize or mitigate their influence. Analysis of the multiple components is therefore necessary to assess the education system and determine the policies and programs needed to improve student learning. While education specialists often cite improvement of school quality as a necessary component of development strategies for the future, they fail to provide the specifics on how to improve quality. This is a key challenge for education systems in PICs, and for the international and regional education communities, to propose initiatives that would enable education quality to be measured and monitored solely for the purpose of improvement.

Many of our countries however experience difficulties in bringing about such major changes on their own given the cost and personnel constraints such changes require. Any major shift beyond the limited interventions currently undertaken to recast curriculum and teaching at this level, in order to bring about the attainment of basic education outcomes for the majority of students, requires corresponding shifts in curriculum orientation, pedagogy, ways of assessing students, and teacher training, all of which necessitate external support (PRIDE, 2002).

A regional approach such as the Pacific Regional Initiative for the Delivery of Basic Education (PRIDE) project would be appropriate and welcomed. What is certain however is that unless there is a shift in the focus in education and assessment in PICs, the majority of the youth will continue to leave school ill prepared for what lies ahead. The PRIDE initiative is not only timely but one that would hopefully address the concerns about the quality of basic education in our region. One must be cautious however in trying to introduce strategies to bring about change to ensure that the intentions of the change are achieved. Hargreaves (1997) cautions that in spite of the knowledge developed on strategies for implementing educational change, many efforts to bring about change do not often meet expectations because of the multi-dimensional nature of the process.

So far assessment in PICs has been restricted to high-stake examinations with ranking for selection as their ultimate purpose. Success rates in such examinations are often measured by the proportion of students selected to the next level of education, although acceptance is often a matter of availability of space and not of achieving the required standard. Quality of education is often mistakenly associated with the proportion of students accepted to the next level. Such misconception reflects the narrow emphasis and focus of assessment in many PICS and is a hindrance to any effort to improve quality.

Assessment is increasingly being considered as an integral part of the teaching and learning process although many consider it as an end to the process. It is not an end but a means for achieving the end, that is, improving student learning. While assessment is perceived as a process of gathering evidence about student learning, what they have achieved as well as what they have yet to achieve, and how effective the teaching has been, there are those who see it as a regulatory process aimed at assuring stakeholders of their investment. Figure 4 indicates the contrasting views of the process with one focusing on the assessment <u>of</u> learning while the other focuses on assessment <u>for</u> learning.

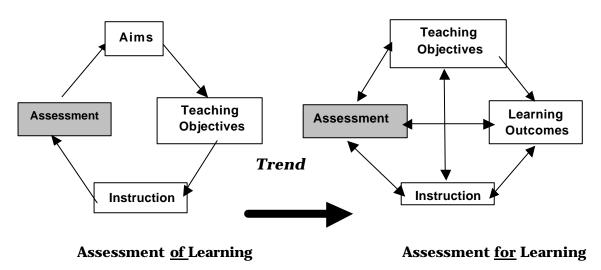


Figure 4: Current changes in the assessment process

Assessment involves two main processes; that of gathering appropriate information about student learning as well as teachers teaching, and the use of the information to improve both the teaching and the learning. The quality of the information (or evidence) collected is therefore crucial as that is the deciding factor in decisions made relating to the educational future of students or in deciding on what strategy needs to put in place in order to improve on any inherent weakness in the system. The evidence must therefore be exhaustive and cover most if not all of the key areas of the curriculum. As the quality of the evidence one collects is only as good as the instruments used for the purpose, it is crucial that the instrument(s) would be able to provide most, if not all, of the evidence that is needed. But as no single instrument will totally assess what needs to be assessed, one can only hope to narrow, but probably never completely close the gap between what we would like to assess and the techniques that are available to assess what we want to assess (Jones & Bray, 1986).

While significant changes have taken place in assessment worldwide, it is only recently that PICs have come to grips with the implications of these changes. Assessment is increasingly being directed towards improving student learning through improvement to <u>how</u> and <u>what</u> students learn as well as towards improvement to <u>how</u> teachers teach. Such efforts are being undermined by the influence of the high-stake examinations that have overshadowed initiatives put in place to improve the quality of learning such as the BELS project, PILL Tests, etc.

As a goal-oriented process that entails comparing student performances to educational purposes and expectations, attention is given to both outcomes as well as the experiences that lead to those outcomes. It is not only important to find out where students end up, but is equally important to find out about student's experiences along the way, the teaching as well as student effort that leads to where they end up. Assessment provides the opportunity to understand which students learn best under what conditions, what problems do they have and in what area. Fredricksen & Collins (1989) argue that, "...the goal of assessment has to be, above all, to support the improvement of learning and teaching" (p.32). However such vision about assessment and what it can do to improve quality will continue to be a mirage as long as the spell cast by the high-stake examinations over the education system is allowed to prevail.

# 5. Looking Ahead in Assessment

Many of the assessment practices currently in place in PICs have outlived their purposes with many systems urgently requiring a review to accommodate the latest developments in the area. Since the early 1990's PICs have become increasingly aware of the desirability to explore alternative methods of assessing student achievements. The tendency has been to look for alternatives that focus on quality of student performances, such as standardsbased assessment, for the ultimate purpose of improving student learning and teacher's teaching, and hence the quality of education.

Attempts to improve the validity of the assessment has resulted in efforts to broaden the process to include areas that would not normally be assessed due to the difficulty associated with including them in the examinations. This results in the gradual recession of the high-stake examinations and a resurgent of assessment for learning directed towards the improvement of the teaching and learning.

Although the changes in assessment practices are numerous, they all aim at improving the process and hence the quality of learning. One such change is the shift in focus from the teacher, and what is taught, to students and what they have achieved (student outcomes) and what have yet to be achieved. While information about students' relative performances is still necessary, the focus now is on student's achievement. Glaser (1986) predicted that assessments would become more concerned with student competence in the various tasks rather than the tests we are familiar with.

Educational professionals support the move towards a broad-based assessment as it provides opportunities for the range of interest of students. With increasing opportunities and pathways becoming available, as well as the increasing diversity in the interests of those staying on in schools, it is no longer justifiable to hold students within common studies, or to assume that a single pathway would suit all students. Like curriculum, assessment needs to be responsive to student needs, after all its ultimate purpose is to determine what students can do and what their strengths and weaknesses are. In this regard it is important for the assessment to incorporate most, if not all, of the outcomes imbedded in the various areas of study.

While the assessment procedures and instruments used may be of little educational value in themselves; they are important in that they provide the means for collecting the evidence about student's performance. Choosing the most appropriate assessment to use becomes a key consideration. The move towards a broad-based assessment is not only in line with the current trend but also with the concerns about the validity of the assessment.

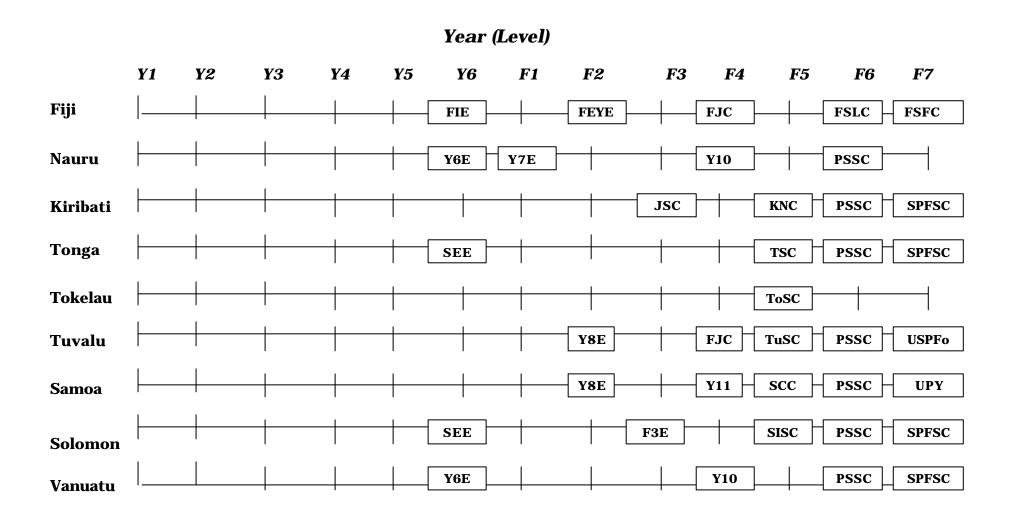
# 6. Making the switch

# 6.1 The challenges

Changing from one assessment practice to another is far more complex than simply doing away with one and adopting another, especially when the one to be replaced has been well entrenched into the system. This is very much the situation in PICs where efforts to encourage teachers, schools, education officials, etc. to make the switch from a system where assessment focuses on ranking students to one that emphasizes improvement in student learning are being undermined by the reluctance to change. Consequently most PICs continue to adopt a system that is still dominated by numerous high-stake external examinations although many of those examinations are no longer serving any useful educational purpose. While the education authorities in many of the PICS have been encouraged to redirect their assessments to focus more on the improvement of student learning, such efforts are being undermined by the continued dominance of the high-stake examinations. The rewards that usually accompany success in the high-stake examinations often encourage students and teachers to continue targeting the requirements for the high-stake examinations instead of the outcomes for the course.

Lack of national assessments in the assessment framework of PICs is indicative of the stronghold high-stake examinations have on the system. The lack of any monitoring strategy is a reflection of the attitude and perception PICs have of assessment being a ranking process put in place to facilitate selection. Such perception has over the years deprived countries of having access to the crucial information they need to improve teaching and learning.

Figure 5 shows the assessment framework, and the high-stake examinations currently in place in some of the PICs.



*Figure 5: Current Assessment Framework in some of the Pacific Island Countries Showing the High-Stake Examinations for both Primary and Secondary.* 

#### 6.2 Emphasis on assessment for ranking

Assessing the achievement of students in primary and secondary schools in PICs is still dominated by high-stake examinations. While these examinations have played an important role in the development of the various education systems over the years, their primary role has always been, and still remain, one of screening to determine those to proceed to the next level. But with limited places available at the next level, the examinations and hence the screening processes became so competitive that success in these examinations become the main focus in the teaching and learning as well as the standard teachers and students aim for.

Consequently teachers adopt end-of-term or end-of-year examinations that closely mirror the external examinations at the end. Such environment emphasizes both the teaching and learning is on improving students' rank position, thus improving their chances of being selected. What the students can or cannot do or what skills have they acquired are compromised with the push for better ranking.

Studies carried out on the impact of assessment on student learning are well documented. A review by Harlen & Crick (2003) on the impact of testing as well as other forms of summative assessments on students' motivation for learning found that tests have negative impacts on student motivation. In their review on the impact of high stake examinations on students, Madaus and Clarke (1999) concluded that;

- high-stakes high-standards tests do not have a markedly positive effect on teaching and learning.
- high stakes tests do not motivate unmotivated students
- authentic forms of high-stakes assessment are not a more equitable way to assess progress of students who differ in race, culture, native language or culture.
- high-stakes tests increase dropout rates, particularly among minority student population. (Madaus & Clarke, pp 172-173)

Although efforts to improve the quality of the assessment have been in place for many years, they have been restricted to improvement of the assessment instrument. Invariably this has resulted in the assessment focusing only on those skills that can easily be assessed by the instrument used. This raises the questions about the validity of the assessments currently in place in most of the PICs.

The global trend to transfer some of the responsibilities for the assessment to teachers has yet to achieve its purpose despite the efforts by regional organisations such as PBEA. PICs still have a long way to go, and have a lot to learn from the experiences of countries that have faced the same concerns about the quality of their education system in recent times.

#### 6.3 Limited Information on Quality of Learning

While similarities in the assessment framework of many of the PICs abound, a "one that fits all" solution may not necessarily be the best approach. As indicated in Figure 5, most countries have national examinations conducted at the end of primary with a series of examinations at the end of secondary. These examinations serve a predominantly selection function although the extent to which the selection is carried out varies from country to country.

Studies show that availability of quality assessment information helps in identifying appropriate strategies for improving quality. Using information from such instruments as

standardised tests designed to identify problem on key areas of the curriculum has helped in identifying teaching strategies and initiatives for improvement. The link between assessment and better learning needs to be widely and better understood so that the assessment information can be effectively used to make informed decisions.

In most PICs, lack of standards-based information, together with the social promotions policy adopted, has resulted in the prevailing situation where teachers are unaware of the specific weaknesses and strengths of many of their students. Refocusing both the teaching and learning on achieving curriculum outcomes rather than on students' relative performance and ranking on the high-stake examinations is one such change that has the potential to improve student learning.

#### 6.4 Stereotype teaching and learning

The predominance of high-stake examinations throughout the education system has resulted in the current environment where the pressure of selection has diverted the teaching as well as learning towards the requirements for the examinations. The focus in teaching and learning is on achieving good marks in the examination, thus improving the chances for selection.

In an environment where teachers are accountable for students' test scores and their ranking instead of the effectiveness of teaching, teachers spend time and effort in coaching the students for the examinations (Pollard et al, 2000). A common practice in many classrooms throughout the region is one where the teacher administers practice tests that take away valuable teaching time simply to confirm to the high achievers that they are good and to the low achievers that they are failures. Moreover, teachers actively coach students to pass the tests rather than helping them to understand what is being tested (Leonard & Davey, 2001). But students can be coached and pass the test even though they may not have learned and understood the concepts on which they are being tested (Gordon and Reeves, 1997).

Johnston and McClune (2000) found that where external examinations dominate the assessment, they have constricting effects on the curriculum and on teaching methods. Even when teachers are not directly teaching to the tests, they often change their approach and adjust their teaching in ways they perceived as necessary because of the tests. Teaching time is also spent on direct instruction with less time on encouraging students to learn through enquiry, research and problem solving. Emphasis on these tests often lead to a "measurement-driven instruction" where teachers use past years examination papers to define the curriculum and what should be taught. Such an environment encourages teachers to become more performance-centered thus forcing students to adjust and learn those that are valued and will gain teacher's approval.

In spite of the influence of the high-stake examinations, evidence suggests that teachers do encourage students to focus more on learning processes (Perry, 1998). However, students are not likely to adjust their learning as long as teacher assessments and teaching methods still implicitly, and explicitly in some cases reflect performance goals. A study by Roderick and Engel (2001) found that more of the slow learners would not give up on themselves if teachers focus more on task and learning-centered goals and using the assessment to help them succeed rather than using the assessment to confirm their failure. While examinations cannot improve learning, nor can they necessarily improve the quality of education, they provide information that could be used to identify possible problem areas as well as strategies for addressing such problems. Tests such as standardized achievement tests have helped in identifying problems with literacy and numeracy in some of the countries in the region.

While high-stake examinations have been successful in producing the required national ranking for selection purposes. Unfortunately it has helped in shifting focus in both teaching and learning from the real issue of achieving outcomes towards achieving better ranking. Even the teaching at levels where high-stake examinations do not exist, the teaching and learning are still directed towards improving students' skills in answering examination-type questions.

The stereotype teaching, and learning to a lesser extent, still dominates both the teaching and learning throughout primary and secondary education despite efforts to introduce other forms of assessment. The heavy emphasis on relative performance continues to encourage rote learning of examinable areas and non-coverage of non-examinable outcomes. Teachers tend to depend to a large extent on the information from teacherdesigned tests and examinations without due regard to the fact that a large number of the learning outcomes do not easily lend themselves to such tests. To provide valid and reliable assessment of student learning, teachers need to put in place assessment programmes that not only cover the range of student learning outcomes but also uses the most appropriate styles of assessment.

In spite of what has been said about the effect of high-stake assessment on learning, teachers are still expected to continue to prepare their students for such assessment, whether or not students are learning much in the process or not. As long as there are limited places available at the upper level, examinations will continue to be used as selection devices (Kellaghan & Greaney, 1992).

#### 6.5 Student Readiness for Promotion

A common policy adopted by many PICs is one where, because of limited spaces available, students are allowed to move from one level to the next with little consideration for their readiness to handle the challenges of the next level. This is referred to as the policy of "social promotion". Students proceed from one level to the next not because they are ready but because of the need to make space to those coming up with little attempt to monitor or to determine whether they have achieved the learning outcomes set out in the curriculum for each level. Such policy allows for a student to progress up the ladder and complete either primary or secondary education without acquired the required skills. In addition, teachers do not have access to information regarding students' actual level of achievement. As such, they assume that students moving up to a new level have achieved the minimum same standard required and therefore target such standard in their teaching rather than the specific weaknesses of students.

The influence such policy has on the quality of education is far greater than what one would normally expect. While it may be necessary for those who are ready, it becomes a problem for those that have yet to acquire the minimum competency, especially in literacy and numeracy. Allowing those who are not ready to proceed compounds the problem. Not only do they have to overcome their shortcomings from the previous level, they have to face the new challenges of the new level. The key concern for the assessment becomes one of matching what students have actually achieved and what they are expected to achieve at the end of each level.

Teachers do not usually have access to specific information about what students can or cannot do. Social promotion contributes to this problem by allowing those who are not yet

ready for the challenges of the next level to move. This also becomes a problem in staircasing situations where the outcomes at each level build on those of the previous level. With the majority of teachers lacking the assessment expertise necessary to gather the appropriate information about student level of achievement, it is not surprising that they adopt the assessment they are familiar with, end-of-topic or end-of-term tests. Teachers need to be well aware of what information they need and how to obtain such specific information if they are to be in a position to assist their students.

Implications of the social promotions policy need to be seriously considered given its possible impact on the overall quality of education. However, the influence of other factors such as teacher commitment and teacher expertise also need to be considered as they all contribute to the current situation. A compromise needs to be reached where students' readiness to proceed to the next level as well as the availability of resources are taken into consideration. Promoting only those students who have been assessed to achieve the minimum competency standard, with no consideration for the resources available etc., may create further problems.

#### 6.6 Monitoring of standards

Most education systems in PICs do not have strategies for monitoring danges in the standard of education, both at the school and at the national level let alone strategies for addressing areas of learning, teaching or the curriculum that have been identified as being problematic. The continued preoccupation with the issue of access especially in primary and lower secondary, has sidelined initiatives put in place to monitor standards. Lack of expertise in assessment also contributes to the failure of the education systems to redirect focus towards improving the quality of education.

While some countries, with the help of SPBEA, are looking at ways of improving the quality of their education programmes, focus is still very much on access. Access to primary and secondary varies considerably from country to country, with figures in some countries such as Fiji, Nauru, Tonga and Samoa over 90% while figures for other countries such as Kiribati, Solomon Islands and Vanuatu are considerably lower. Figure 6 shows the gross enrolment figures for primary and secondary for some PICs.

Member Country	Gross Primary Enrolment	Gross Secondary Enrolment		
Fiji	90	36		
Kiribati	77	44		
Nauru	96	34		
Tonga	90	67		
Tuvalu	88	74		
Tokelau	na	na		
Samoa	94	70		
Solomon Is	39	24		
Vanuatu	72	44		
Average	80	49		

Sources - Pacific Human Development Report 1999 - EFA 2000 Report - UNDP HDR Report 2002

*Figure 6: Gross enrolment for primary and secondary in Board member countries* 

Emphasis on access has resulted in little effort by countries to monitor the quality and standard of education. Consequently, results of students' performances in the highstakes examinations are often wrongly used as indicators of standard. In spite of the shortcomings, increasing commitment by the regional and international education communities have made some impact in making countries aware of the need to put in place strategies for monitoring the standard of education in their respective countries.

If the quality of education in PICs is to improve, the education authority in each country needs to redirect the focus in its assessment towards improving the teaching and learning processes and put in place strategies that would ensure the achievement of the various learning outcomes. Achievement of the literacy and numeracy outcomes is crucial because of their impact on other areas of learning. Studies in other parts of the world have established the close link between literacy and numeracy and student performances in other disciplines. Poor reading and writing skills become effective constraints for learning in other subjects (Elley, 1992). This is particularly true in most of the countries in the Pacific.

#### 6.7 Corrective (recovery) programmes

Considering the high proportion of students in PICs who do not achieve the learning outcomes prescribed in the curriculum for each level, but are allowed to proceed to the next level, one would expect recovery programmes to be an important feature of the education programme at each level. This is not the case however as it is left to the individual schools to decide whether such programmes or strategies are necessary, but with the rush to cover the crowded curriculum, and the pressure imposed by the highstake assessments at the end, schools do not have the time and effort to put in place such strategies.

In spite of the high proportion of students who struggle to achieve the learning outcomes prescribed in the curriculum, no effort has been made to address this shortcoming in the education system. It would be interesting to find out the gap that exists between what students have actually achieved and what the curriculum expects them to be able to achieve. Experiences from the PILL tests (1994 – 1998) found that it is not uncommon for students to be at Year 6 for example, but still struggling to achieve many of the learning outcomes prescribed for Years 4 and 5. With no formal arrangement for any corrective measures in place, the problem is compounded each year as students are allowed to move up, with no attempt to address the problem areas, to a point where they find that they can no longer cope with the demands of the curriculum.

Such situation can only be resolved if teachers are in a position to identify what are students' specific areas of weaknesses and put in place strategies for addressing such weakness. Teachers would not be in a position to design remedial programmes for non-achievers as well as enrichment programmes for first-time achievers if they do not have access to such information. This can be successfully achieved if teachers are relieved of the pressures imposed by the high-stake examinations throughout the education system.

Figure 7 gives a possible strategy that could be considered for adoption as it provides a corrective pathway for those that have yet to achieve the learning outcome in the first instance, as well as an alternative pathway to allow those that achieve the learning outcome in the first instance to proceed. An area of concern however is the question of how many times would a student, who continue to fail to achieve the outcome being assessed, be allowed to pursue the corrective pathway before they are either allowed to proceed to the next outcome or pursue other alternatives.

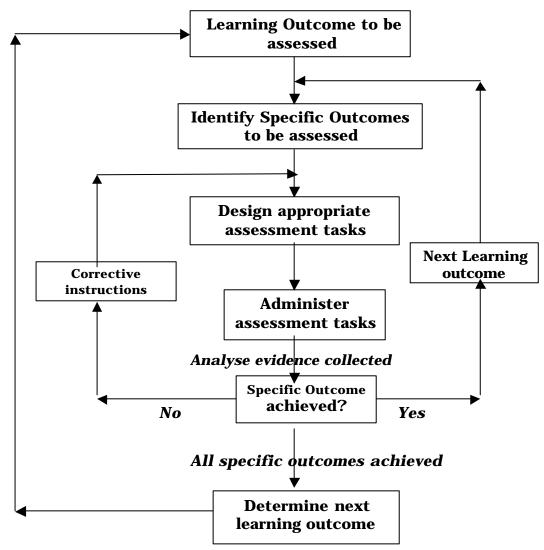


Figure 7: A proposed strategy for assessing achievement of students in the classroom situation

#### 6.8 Teacher expertise

A key issues that contributes to the persistence of stereotype teaching and learning in both primary and secondary is teachers' limited expertise in the use of assessment to gather information that would help improve their teaching as well as student learning. A perusal of the syllabus of some of the key teacher training institutions in the Pacific reveals the need for more in depth coverage of assessment, especially good assessment practices. It is important for teachers to be aware of good assessment practices especially when they are expected to be able to carry out valid and reliable assessment of their students' achievements. It is not surprising therefore for teachers in both primary and secondary not to have the appropriate skills and expertise to be able to carry out a proper assessment of their students' achievements.

Teachers lack of expertise in assessment has not helped in efforts to redress the misconception people have of assessment being synonymous to examinations.

Consequently, many teachers consider teacher-designed tests and examinations as the only form of assessment that can provide all of the information they need. Without the appropriate knowledge and skills in good assessment practices, teachers will continue to rely on examinations as the only form of assessment without realising that they are only assessing a minor portion of what students achieve. For teachers to change the way they conduct their assessment, and hence improve the way they teach, they need specific training to enable them to use the multiplicity of assessment methods and techniques available. The question of choosing the assessment method that is "fit for the purpose" becomes an issue if teachers are not able to choose and use the method that is most appropriate.

Despite the ongoing debate on the use of assessment information, the fact remains that teachers need to be trained so they acquire assessment skills even if only to allow them to choose the most appropriate method for the task. Gathering data about students' relative performance in a particular learning area requires a different method, a norm-referenced instrument, than gathering data about students' level of achievement in the various outcomes within the same learning area, standards-based instruments. Without the proper knowledge and training most teachers would continue to use norm-referenced instruments to serve both the purposes mentioned above, resulting in the misuse of information. After all, an assessment is only as good as the instrument one uses, and how the data gathered are being used and for what purpose.

The main issue however is not one of knowing the various types of assessment but one of having the assessment expertise to be able to use the assessment information appropriately. Gipps (1996) argues that with proper training teachers can use assessment for selection and accountability to improve learning provided that teachers are well trained to use the data from one assessment to serve the purpose of another. One must not be misled however into believing that introducing a new assessment innovation would automatically improve learning and hence education quality. It is the struggle to make such innovation work and achieve its purpose (Sebatane, 1998). After all, the success of any innovation aimed at improving the quality of learning would depend to a large extent on the ability of teachers to implement such innovation. "If teachers are being asked to make fundamental changes in what they teach and how they teach it, then they need sustained support to try out new practices, learn new theories, and make it their own" (She ppard, 1995).

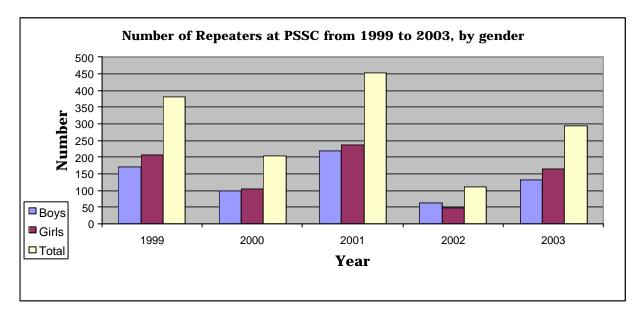
#### 6.8 Inflexible Structure

The structure of the education system in most PICs has been in place for quite some time, usually 6 years of primary followed by 6 years of secondary. The curriculum for both primary and secondary is then organised around years with a 6-year curriculum for primary and 6-year curriculum for secondary. Few countries however have other arrangements. Invariably the curriculum lays out clear objectives, or learning outcomes in some cases, that students are expected to achieve at each level or year. This means that it is possible for both teachers and students to be made aware early in the process of what students are expected to achieve at each level.

But because of those issues earlier discussed, teachers are not given the opportunity to focus their assessment on identifying the level achieved by each student in each outcome. Instead, students are given a mark or grade for each subject. On the basis of the single mark (or grade) students are ranked for selection of some sort. Ranking is often based on an aggregate of the marks or grades awarded for the various subjects taken and acceptance to the next level of education is often considered as the PASS standard.

Unfortunately the rigid structure of the education system does not allow students with partial success to proceed. Instead, only those students who have achieved a specific aggregate arbitrary score, often based on the number of places available at the next level, are allowed to proceed further. Those who do not make the arbitrary score either drop out or repeat all the subjects again at the same level, for many of those taking high-stake examinations such as those at the end of primary or at the end of secondary.

The inflexibility of such structure, compounded by the highly selective assessment system in place, has resulted in an increasing proportion of students, especially at the exit levels, opting to repeat the whole years programme in the hope of improving their performance and hence their chances of being selected. While students, parents, and even the education authorities consider this as giving students a second chance, education experts see it as a "priority problem" that is linked to weaknesses in the education system (Schiefelbein & Schiefelbein, 2003). Figure 7 shows the total number of repeaters at PSSC award (end of Form 6) from 1999 to 2003.





The inflexibility of the curriculum and the rigid structure of the education system have to some extent contributed to the current situation where the majority of the students at any level fail to achieve the level of performances the curriculum expects. With the social promotions policy in place, the performance of students on key basic skills such as literacy and numeracy could only be assessed if appropriate instruments are put in place for such purpose. The system also does not allow for students to be assessed at the level of their achievements although they could be at another level (multi-level study).

Introducing multi-level studying to schools poses a far greater challenge than one would expect as there is a need to carefully consider the implications of such an initiative especially the resource and personnel implications. Not only would it require teachers to be skilled in multi-level teaching as well as assessing students on outcomes that span more than one level, it would also require careful timetabling so that it would be possible for students attending classes at one level to be assessed on outcomes from courses offered at other levels. On the bright side, introducing multi-level study, especially at those levels with high stake assessments, would allow those who would repeat all their subjects because they fail to be selected to the next level, to improve their performance on those subjects while pursuing those subjects they perform well in at the next level. For such an initiative to be possible the structure of the education system, especially the level structure of the school system, needs to be flexible enough to allow for such initiative to take place. As well, the curriculum needs to be restructured around key learning areas or strands thus making it possible for students to be assessed on those outcomes prescribed for each strand. Why would a Year 4 student have to wait a year before he/she can be assessed in the Year 5 outcomes of a given strand if he/she has shown that he has achieved all of those outcomes prescribed for Year 4?

#### 6.8 Mismatch between expectations and practice

While variations are evident in the curriculum of PICs, there are similarities both in content and in structure. In most situations, the curriculum invariably has statements that indicate what students are expected to be able to achieve at the end of each level. These statements or outcomes portray the skills and expected level of mastery or achievement in each area. The outcome statements provide guidelines for teachers to use as the basis for their teaching, while high-stake examinations in later years often distort the teaching from focusing on the curriculum outcomes. This has resulted in the mismatch that currently exists in what teachers emphasise in their teaching and what the curriculum expects.

Because teachers are not targeting the curriculum outcomes in their teaching and also in the assessment they carry out, it means that students are not focusing their learning on achieving the curriculum outcomes. While teachers may be working hard in teaching their students, only a small proportion do actually achieve at the level expected in the curriculum. This mismatch between the teaching and what the curriculum expects is a major issue that PICs need to address.

Focusing teaching as well as assessment on the outcomes of the curriculum requires a refocusing of teachers' teaching. Teachers need to be in-serviced as they are expected to be knowledgeable of the various standards of performance, and capable of developing assessment instruments that would determine the level of performance of students.

# 8. A Possible Way Out

#### 8.1 The SPBEA Initiative

Since the mid 1990s, SPBEA has initiated discussions with its member states on good assessment practices, and what systems need to put in place. This is part of its strategy to refocus attention on the use of assessment to improve learning rather than promote ranking for selection. Outcome of these discussions has seen positive moves towards a broad-based assessment with emphasis on the specific outcomes each student has achieved. With financial support from the Australian Assistance for International Development (AusAID), SPBEA was able to promote the concept of "assessment for learning" among its members.

With high-stake examinations likely to remain a crucial part of the assessment framework of each country, SPBEA introduced a strategy (school-based assessment project) aimed at empowering teachers and students to use assessment to improve teaching as well æ student learning. This redirection in assessment was an attempt to enable teachers to gather information that would enable them to find out more about their students' learning as well as their specific areas of strengths and weaknesses thus placing them in a better position to provide specific corrective assistance to each student. At the same time it provided the opportunity for students to find out what they need to do in order to achieve at the level expected.

In introducing the strategy in the mid 1990s, SPBEA was mindful of the huge challenge of introducing such a strategy in an environment dominated by high-stake examinations. All efforts were make to convince teachers as well as education authorities of the advantages of redirecting focus from assessment for ranking towards assessment for learning. Convincing teachers in schools that the new strategy allows the assessment to take on board the specific needs of the diverse range of children now staying on in schools was a challenge on its own.

In proposing the new assessment strategy for consideration, attempts were made to take on board all of the concerns and issues raised earlier in this paper. In so doing, one would hope that countries would consider it as an alternative strategy that is in line with current worldwide trends in assessment where emphasis is on improving student learning rather than focusing on what each student has learned compared to other students.

The new assessment strategy possessed certain features that can be considered as characteristics of the new strategy, some of which included;

- close cooperation between teacher and student throughout the assessment process allowing closely observation of students' progress by the teacher and providing timely feedback as well as encouragement to students whenever necessary.
- integrating assessment as part of the teaching and learning process.
- allowing teachers, as well as other stakeholders, to determine the progress, or lack of progress, of students at any given point using student profiles. Such profiles clearly indicate each student's level of achievement in any learning area or outcome.
- multiple sources of evidence to assess student learning.
- multi-dimensional and broad-based allowing most if not all of the experiences important to the development of each student to be incorporated.
- results of the assessment used to guide improvement in teaching rather than facilitate selection.
- identify those skills and outcomes that each student has achieved and mastered, as well as those they have yet to achieve.
- reports should enable stakeholders to analyse the learning, or lack of learning, that has taken place. It also provides information on the specific strengths and weaknesses of each student as well as the areas where each student needs assistance.

The above characteristics clearly show that the proposed strategy did not anticipate an assessment system that is dependent on the current tests and examinations. Instead, it anticipates a system that allows teachers to use assessment as a tool for gathering crucial information about students which would help them improve their teaching. The strategy also anticipates developing assessment instruments at crucial levels. Information gathered from these instruments enables teachers as well as education authorities to monitor changes in the standard of performance of students over time. This can only be achieved by developing standardised instruments with clear standards where each standard represents an interpretable level of student achievement that would retain their meaning over time and can easily be understood by both teachers and students.

# 8.2 What is Assessment for Learning?

In the context of the project, assessment for learning is simply a strategy aimed primarily at empowering teachers to use the evidence of the assessments they carry out each day in the classroom to improve their teaching as well as help students in their areas of weaknesses thus improving their learning. Assessment for learning is suitable for situations where external examinations are not the main focus of the assessment. It is therefore appropriate for such assessment strategy to be adopted throughout primary as well as junior secondary as it helps redirect the focus on the learning of the students.

With the improvement of learning as its ultimate goal, the assessment for learning project targets teachers to adopt good assessment practices that provide the most appropriate evidence and information that would help them in their endeavour to improve student learning. Thus putting teachers in an ideal position to provide the specific assistance each student needs. While the teacher may be responsible for the assessment, the school authority's commitment is crucial to the success of the strategy. The school authority needs to be aware of what is involved and how the assessment is carried out and what resources are necessary for the successful implementation of the strategy.

#### 8.3 Justification for assessment for learning

The question one would ask is where there are supporting evidence to support the assumption that introducing assessment for learning as a formative assessment strategy would result in improvement in learning. A survey by Black and William (1998) found that where formative assessment is practiced in school, significant learning gains resulted. This gain was found to be significant throughout from 5 year old to university students. The survey also found that the effect of increased focus on learning outcomes were more significant than those experienced as a result of comprehensive policy change. Black and William further found that student performances would experience a 35% gain compared to those not involved in any formative assessment. At the country level, a properly organised formative assessment strategy would realise significant improvement in the country's overall performance. Other researches have also found that improved formative assessment helps low achievers and those with learning difficulties more than the rest of the cohort. However frequent feedback of appropriate information to students helps every group in the cohort thus improving the overall level of achievement of the cohort.

#### 8.4 Appropriate Structure

Although primary education covers the first six years in most countries, eight years some, it is necessary to propose an assessment regime that would achieve the ultimate purpose of the proposed strategy, that is, the improvement of teaching and learning. Undoubtedly a so-called "appropriate structure" would be viewed differently by countries depending on the structure of the education system in their respective countries. One thing is certain however, that countries need to restructure the system if the quality of teaching and learning is to improve.

In its meeting in Apia in January 2004 the ministers of education from PICs adopted the recommendation from SPBEA that countries need to re-structure their assessment system to put in place an assessment regime that is in line with their curriculum framework. This recommendation is aimed at trying to minimise the tussle between the need to align the assessments with the curriculum expectations and the requirements of the high-stake examinations.

The appropriate assessment framework has to comply with the characteristics outlined earlier in this proposed strategy. While there are aspects of the current system that need to be taken into consideration, especially the influence of the high-stake examinations on teaching and learning, the project emphasised the need for the assessment to promote the improvement of teaching and learning. Adopting the strategy of assessment for learning is expected to provide a clear profile of each student's capabilities and standard of achievement. This means that results can also be used to determine a student's competency thus making it possible to determine their readiness to proceed up the ladder.

While the strategy allows for assessment for learning to be emphasised throughout primary and up to junior secondary, it is mindful of pressure exerted by the numerous high-stakes examination ins the system as well as the function such examinations fulfil. While there is a need in some countries to select those students in primary to proceed to secondary, the profile of student achievements could be used to serve such purpose although some form of a referenced test may need to be put in place to determine the relative standing of schools. However, this would only be necessary in situations where students, at exit points, choose the school they intend to go to.

Figure 8 shows the structure anticipated in the assessment for learning strategy where emphasis throughout the system is on assessments carried out by the teacher with standardised monitoring instruments (SMI) strategically administered throughout the system. This structure anticipates a situation where assessment for learning dominates the earlier years from primary to junior secondary while assessment of learning dominates the senior years.

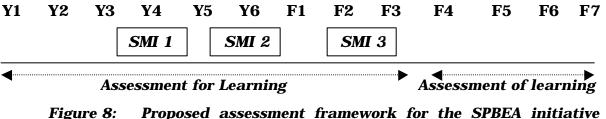


Figure 8: Proposed assessment framework for the SPBEA initiative for "assessment for learning".

#### 8.5 The assessment

As seen in Figure 8, the assessment for learning strategy has assessment carried out at two levels; at the school level for primary and junior secondary and at the national level for the purpose of monitoring standards or achievements in key areas of the curriculum.

As the focus in the assessment at both levels is on the improvement of teaching and learning, intensive in-service training of teachers on classroom assessments is expected to be an important of the strategy. Teachers need to be able to design simple assessment programs and tasks that would provide the diagnostic information they need to improve their teaching of students. Specially developed instruments that focus on the outcomes of the curriculum in any chosen level or levels need to be designed to provide the baseline information needed by the education authority, or the school authority, to monitor the overall standard of performance of the school on any given domain(s) over time. Such information would assist the school or the national authority in deployment of resources, review of curriculum, or conducting in servicing of teachers, etc. To ensure that the assessment achieves its purpose, SPBEA has set up a team in each participating country to help teachers identify the curriculum objectives and transform them into measurable learning outcomes, which then forms the basis for the assessment. Because assessment is an outcome-oriented process, the assessment works best in situations where the outcomes are clearly and explicitly stated, thus making the matching of students' actual performance with expected outcomes easier.

Provided that the curriculum in member countries are structured in such a way that the anticipated outcomes for each level or year are clearly identifiable, the assessment would focus on assessing the extent to which each student has achieved the prescribed outcomes.

#### 8.6 Reporting under assessment for learning

Reporting the results of the assessment is an important step in the assessment process. With the emphasis on improving student learning, results of the assessment needs to be reported in a way that stakeholders can understand while at the same time providing a clear indication of the level achieved by each student in each learning outcome.

The current form of reporting adopted by most member countries, where a single mark or grade represents a student's overall level of achievement in any given subject is certainly not providing a true picture of what the student can or cannot do. Not to mention the fact that if the results are moderated or standardised, the results reported bear very little reflection of the student's true level of achievement. A more appropriate method for reporting what students have achieved, which complies with the thinking in the proposed strategy, is that of profiling, be it by skills or by outcomes.

As evidences from assessment for learning are not amenable to the usual aggregation, averaging, or to the other measurement techniques, they are best reported separately as part of a profile thus providing a more humanistic approach to assessment and invalidating the classification of students as either pass or fail at the same time. Student profile encourage the competence and achievements of each student in any area of a given domain or skill to be recognised while giving each student the opportunity to experience and appreciate his/her own achievements. Such recognition is self-perpetuating and motivates students to become more self-reliant and confident. At the same time, it recognises the diversity in the ability of students and the wide variation in the skills to be assessed. It also has the potential to give adequate recognition to the full range of cognitive, affective and psychomotor outcomes prescribed for each level. Profiling provides the opportunity for the assessment to provide more complete information about each student's achievements while at the same time highlighting areas of weaknesses and strengths.

Figure 9 shows a sample report for a Year 4 student in Mathematics where the information from the assessment for learning is reported according to the level achieved by the student in each learning outcome.

#### 8.7 Monitoring of Standards

While adoption of assessment for learning would undoubtedly result in the improvement of student learning, information from the assessment is most useful for use by teachers within the school although with proper moderation such information can be used for purposes outside the school. Because of is classroom-base, it would not be easy for the education authority or school authority to monitor the situation over time. Has the standard improved or has it stayed the same over the last 5 years? Such a question cannot be answered using information from the assessment for learning. Such information can only be available if instruments are designed specifically for such purpose.

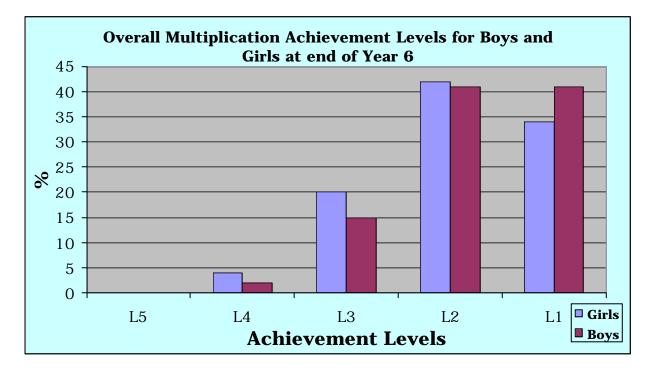
Finding out how a system or a programme is working is an important element of this assessment strategy. While assessment for learning provides information about the specific level of achievement of students it does not provide information that would enable one to monitor the overall situation or standard over time. Monitoring of standards is crucial in that it provides information to the national education authority, and the school authority to a lesser extent, on whether standard of performance at the national level (or school level) on a key area of the curriculum, or a strand has change or has stayed the same or over a specified period. The authorities would also like to find out the extent to which students at each level are achieving the curriculum outcomes. Similarly, individual schools, districts or provinces may also be interested in finding out how their students have performed over time. Answers to the questions raised above can only be provided if instruments are designed to gather information that would allow standards to be monitored.

Although the basic principles behind the assessment is similar to assessment for learning, the design and administration of the assessment as well as the use of the results follow different pathways due to the different uses anticipated of the results. While assessment for learning strategy may provide information that teachers could use to improve student learning, standards monitoring focuses on providing information that the education or school authority could use to monitor overall changes in the standard of performances over a given domain or learning area over time.

The instrument is developed and administered externally under standardised conditions. In the initial years of implementation of such test, the information is used to determine baseline standards of achievements in particular areas of the curriculum for specified levels. Over a specified period of time (every three or four years), a particular cohort's performance in the assessment is compared to the baseline information. Results of such comparison provide national authority and school with information that would enable them to identify changes and trends in students' level of achievement over time.

Reporting of the outcome of the assessment highlights the proportion of the selected cohort achieving at pre-determined benchmark performance levels. Such proportions for each performance level are then compared with the proportion for the same level over a different point in time. Each level is described in terms of the behavioural characteristic that a student achieving at that level needs to show.

Figure 10 shows an example of a typical reporting system for a given learning area or strand in Year 6 mathematics course is given in Figure 8.



*Figure 10: A sample report for achievement of boys and girls in multiplication at the end of a Year 6 Mathematics course.* 

# **Achievement Levels (Standards)**

- **Level 1** Cannot multiply 3 or 4-igit numbers with 2-digit number for both whole and decimal numbers.
- **Level 2** Correctly multiply up to 3-digit numbers with 2-digit numbers for whole numbers most of the times but cannot multiply decimal numbers.
- **Level 3** Correctly multiply up to 4-digit numbers with 2-digit numbers for whole numbers most of the times but have problems multiplying decimal numbers.
- **Level 4** Correctly multiply up to 4-digit numbers with 2-digit numbers for whole numbers but sometimes have problems with decimal numbers especially the placing of decimal points.
- **Level 5** Correctly multiply up to 4-digit numbers with 2-digit numbers for both whole and decimal numbers.

#### 9. Summary

While the initiative in place is still at the early stage, it is starting to make an impact although it is difficult for countries to take in the philosophy behind assessment for learning. A greater number of teachers in PICs are becoming familiar with both the assessment approaches incorporated in the initiative, the assessment for learning and assessment for monitoring. While the results are still being taken lightly or overshadowed by the high-stake assessments at the end, education authorities are starting to take note of this development. Teachers, as part of their normal teaching, have been conducting assessments of some sort and have been monitoring their students' achievements as part of their normal teaching. This strategy however is aimed at getting teachers to refocus their assessments towards getting students to achieve the outcomes or the achievement standards expected in the curriculum. At the same time, standards monitoring provides information regarding the overall performance of the group over time.

The implications of this initiative is likely to have far reaching effect on the quality of education than one would expect mainly because of its focus on the improvement of student learning. However it would require significant changes in the way teachers teach, from one of teaching to external examinations to one of teaching to improve student learning.

Finally, the strategy has one objective in mind, that of improving student learning by getting teachers to be more involved and adopting teaching strategies that would enhance effecting learning. Providing timely feedback to students is an important feature of the strategy and would require adjustments to teaching methodologies resulting in significant changes to the role of the teacher.

While the proposed strategy will undoubtedly see improvement in student learning, there is always the issue of teachers' belief of how students learn which would determine their commitment to any new assessment strategy. It is teachers' belief on how students' learn that will ultimately determine how they teach which in turn will be reflected in the way they carry out the assessment. Sample Only

# STUDENT PROFILE

James Kapisi NAME OF STUDENT:

**YEAR:** Four **SCHOOL:** Banana Primary

	STRAND		YEAR (LEVEL)						
SUBJECT	Or DOMAIN	Learning Outcome	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Comments
Maths	1. Numbers	1.1							Achieved to end of Year 4 level.
		1.2							Achieved to end of Year 3 level.
		1.3							Both achieved only to end of Year 2 level
		1.4							
	2. Measurement	2.1							Achieved to end of Year 6 level.
		2.2							Achieved to end of Year 3 level.
		2.3							Achieved to end of Year 2 level.
	3. Operations	3.1							Achieved to end of Year 6 level.
		3.2							Achieved to end of Year 4 level.
		3.3							Achieved to end of Year 3 level.
		3.4							Achieved to end of Year 2 level
	4. Graphs	4.1							Achieved to end of Year 4 level.
		4.2							Achieved to end of Year 3 level
	5. Statistics	5.1							Achieved to end of Year 5 level
		5.2							Achieved to end of Year 4 level
	6. Geometry	6.1							Achieved to end of Year 4 level
		6.2							Achieved to end of Year 3 level

### A sample student profile based on the outcomes of a Year 4 mathematics course. Figure 9:

# <u>Strand</u>

# Learning Outcomes

- **1.Numbers** 1.1 Correctly count whole numbers to level required by the curriculum for each year
  - 1.2 Correctly identify place value of any digit to level required by the curriculum for each year
  - 1.3 Correctly write whole numbers in word form and vice versa to level required by the curriculum for each Year.
  - 1.4 Correctly approximate whole numbers to level expected in the curriculum

# **2.Measurement** 2.1 Can use ruler or tape to correctly measure length and height of lines, objects, etc.

- 2.2 Can use protractor and measuring cylinder to measure angle and volume respectively to level required by the curriculum for each Year.
- 2.3 Can use given measurements to find perimeter and area of shapes to level expected in the Curriculum for each Year

# **3. Operations** 3.1 Can add two numbers correctly to level specified in curriculum for each Year.

- 3.2 Can subtract two numbers correctly to level specified in curriculum for each Year.
- 3.3 Can multiply two numbers to level expected by curriculum for each Year.
- 3.4 Can divide two number to level expected by the curriculum for each Year.

# **4.Graphs** 4.1 Can draw graphs (to level expected in curriculum) correctly

- 4.2 Correctly interprets graphs
- **5.Statistics** 5.1 Can represent simple data in picture form
  - 5.2 Can calculate mean (average) of given set of data

# **6.Geometry** 6.1 Correctly name different shapes and polygons to level specified in curriculum for each Year.

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