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PAPUA NEW GUINEA

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## IS IT THE RIGHT TIME TO IMPLEMENT THE NEW 1+6+6 BASIC EDUCATION SYSTEM IN PAPUA NEW GUINEA?

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[www.pngnri.org](http://www.pngnri.org)

Volume 14, Issue 4

### Key Points

- Education is one of the key factors for improving human capital.
- Continuous reforms in curriculum and education system in Papua New Guinea often creates problems in the education system.
- The 1+6+6 basic education system being advocated by the Department of Education with no proper consultation with key stakeholders may be difficult to implement.
- If Department of Education wish to implement the 1+6+6 in an effective manner, there is a need for consultation with key stakeholders, train teachers on the new curriculum and all necessary facilities provided.

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April 2021



## IS IT THE RIGHT TIME TO IMPLEMENT THE NEW 1+6+6 BASIC EDUCATION SYSTEM IN PAPUA NEW GUINEA?

By **Jeremy Goro**

**E**ducation is one of the key factors that can be used to improve human capital and productivity, and consequently, improves the standard of living of a country. Papua New Guinea's National Education System is often criticised for making frequent changes to the curriculum and the structures. In the last two decades, there has been two curriculum and structural reforms. The general public does not often support the frequent changes to education system. However, the Department of Education (DoE) seems to be determined to implement the new Standard-Based Curriculum (SBC) education system with a new 1+6+6 structure without proper consultation with key stakeholders. The new education system has the potential to complement the new definition of universal basic education which covers schooling from prep to grade 12. This can create some problems and opportunities in schools.

### The education system reforms in Papua New Guinea

Before educational system reform began in 1993, schooling was based on a four-tiered education system: primary or community school (grades 1 – 6), high school (grades 7 – 10), national high school (grades 11 – 12) and tertiary or universities. This structure was more traditional since the inception of the national education system in 1973. The education system was '6+4+2' from primary or community school through high school and to national high school with examinations used as a gatekeeper after each segment. In this system, children from the village went straight to community school and sat their first examination at grade 6 before proceeding to high school to sit for the grade 10 examination. Only a few selected students went onto grade 11 in the four national high schools while many went to the colleges. A few were also selected directly to universities.

The first wave of system reform began in 1993 with a

change from '6+4+2' to '3+6+4' where children spent three years in elementary school, six years in primary school and four years in secondary school with examinations at grades 8, 10 and 12. This structure used outcomes-based curriculum (NDOE, 2004).

The second wave of education system reform to be implemented from 2021 is '1+6+6' (Education Facts, 2018). This system will replace the current '3+6+4' where the education system will have one year Early Child Education Development, six years in primary education and another six years in secondary education. This means that the current infrastructures in schools will need to change to accommodate the new system. It implies that secondary schools will need more classrooms and dormitories to accommodate grades 7 and 8. The current system has four grade levels in secondary schools but the new structure will add two more grades (7 and 8). This might create more problems in competing for spaces in the classroom, dormitories, mess, science laboratories, computer laboratories and even pupil-teacher ratios in the already strained infrastructure in secondary schools. However, there may be less problems at the primary level because of the reduction in the number of grades and students to manage.

### The curriculum reforms

In the last four decades, PNG education system has undergone revolutionary reforms from the Objective-Based Curriculum to Outcomes-Based Curriculum (OBC) and now into SBC. The first Objective-Based Curriculum was in place during PNG Independence and post independence up to 2005. It is a teacher-centred curriculum where knowledge is transferred from teachers who are assumed to possess knowledge (learned) professions to learners (students). The curriculum was designed to provide students with enhanced problem-solving skills. Teachers centered their teaching on identified objectives which become

the goals of learning. The learning objective or objectives are normally centred around knowledge, skills and attitudes.

This curriculum used a three tier '6+4+2' education system where a child spent six years in primary school, four years in high school and two years at the national high school or even direct entry to tertiary institutions after grade 10. It used a rigorous filtering system where national examinations were conducted at grades 6 and 10 and only those who met the requirements reached grade 12. This system produce less (very few) drop outs from grade 12 as it filtered students along the process. However, there were many drop outs at grades 6 and 10.

### The Outcomes-Based Curriculum

Students who dropped out from school did not fit into the community well and were migrating to towns and cities looking for better opportunities and it was seen as a social problem according to Matane Report (1986). Thus, OBC was introduced in the early 1990s after the Education Sector Review (NDOE, 1991). OBC is a student centred teaching and learning. This means that the attention is on the learning activities of students, which is based on what students are able to do and demonstrate on completing the units of lessons (Killen, 2003). The principles of SBC that are the same as OBC include the following: clarity of focus, backward design, and high expectations (Killen, 2003). As a result, there were two reforms in the 1990s and early 2000. The first was Structural Reform where the structure changed from the old 6+4+2 to a new system 3+6+4 (NDOE, 2004). The new system allowed children to learn in their local dialect in the first three years of elementary school and transit to primary school at grade three. This transition created a problem of language transfer as the children would have to start speaking and writing in English in grade three. Although, some elementary schools, especially in urban centres, prefer teaching in English in the later part of grade two, most elementary schools taught in local *Tokples* and *Tok Pisin*.

Most elementary schools in the rural areas did not prepare their students well for the transition into English. As a result, most students could not write and speak English well in grade 3. The problem of low literacy and numeracy level was also evident in the later years of primary, secondary and even at tertiary

level. There were numerous calls to abolish the OBC by parents, teachers and other stakeholders. This is because it contributed to poor performances of students in the national examinations (Goro, 2012). Another critic as quoted by Goro (2012) described Outcomes-Based Education (OBE) as a failed system adopted into the country without proper research and consultation.

As a response to these calls for a better quality education by various key stakeholders, the former Oneil/Dion government called for review of the OBC instituting an 'OBE Exit Task Force' in 2012. The OBE Exit Task Force recommended for OBC to be replaced by Standard-Based Curriculum under a new structure, 'Standard-Based Education (SBE)'.

### The Standard-Based Curriculum

The SBC is a subset of OBC that has a set of learning objectives standardised or codified by the controlling education agency, usually the Department of Education's Curriculum Development Division. SBC is structured on a more material system, where students directly access resources to reason and extract information at their own pace. It refers explicitly to specific knowledge, learning experiences and set of assessments to check for the mastery of knowledge by comparing the achievements against the set standards or benchmarks.

The new SBC will have a '1+6+6' system. A one year early child education, six years of primary education (grades 1 to 6) and another six years of secondary education (grades 7 to 12). The new structure will make primary schools to accept grades 1 and 2 and pushing grades 7 and 8 to secondary school. This might create shortages of classrooms in the current structure in secondary school. This calls for more investments in infrastructures in schools, especially in secondary schools as it will take on two extra grades (7 and 8).

### Problems associated with frequent reforms to the education system

- **Inadequate awareness.** It is paramount that all new curriculum should be given ample time for awareness, especially through consultation with key stakeholders. Nation-wide awareness in schools, including conducting regional workshops to engage teachers to have input. This is rarely conducted in PNG. Curriculum Development is

confined to DoE at the Curriculum Development Division (CDD).

- ***Inadequate curriculum materials.*** With frequent changes in curriculum, the division responsible for writing curriculum materials often have difficulties in meeting the demand for curriculum materials. A complete curriculum pack should have a syllabus, teacher's guides, teacher's resource books and students' resource books. From past experience, CDD find it difficult to deliver full pack for the past OBC and does not seem ready to deliver the full pack for SBC.
- ***Inadequate school facilities.*** With the transition from the '3+6+4' to '1+6+6', there will be shortage of spaces for students in secondary schools as grades 7 and 8 migrate to secondary schools. With the new 1+6+6 structure, the current facilities like science laboratories, computer laboratories and classrooms are not enough to cater for the increasing student into the new structure.
- ***Inadequate teacher training and incentives.*** Teachers are key stakeholders to implement any new curriculum. Thus, they always need training to be able to implement the curriculum properly. At the moment, all the teachers are product of outcome-based curriculum. It will take time to adapt to the SBC because the teachers colleges have not trained teachers to teach using SBC. With new further training, better incentives should be provided for teachers as well.
- ***Incomplete curriculum cycle.*** All curriculum reforms should reach maturity and must be evaluated after more than 10 years of implementation before any change of curriculum is made (Bascia and Hargreaves, 2000). OBC was implemented for 20 years without any form of evaluation. This implies that it is difficult to draw lessons from OBC for the implementation of SBC. Evaluation of OBC should be done before the implementation of SBC because it will help us identify the areas of weaknesses and strengths which is valuable for the proper implementation of SBC.

### Strategies to improve the effective implementation of '1+6+6' basic education system

For the education reforms to be successfully implemented, the following strategies should be considered by DoE;

- ***More awareness is required*** for the change to be accepted and adopted. Teachers need to be trained and made aware of the change in curriculum. The students and parents also need to be aware of the changes in the curriculum and structures because the change will have impacts on teachers and students. According to Wedell (2009), power-coercive top-down systemic education reform approach has an impact on teachers' emotions. Forced changes are difficult to implement in schools.
- ***Invest more into schools' facilities and resources.*** New structural reform requires government to invest more money into school facilities to cater for the increasing number of students. In addition, SBC is structured on a more material system where students directly access resources to reason and extract information at their own pace. According to Goro (2012), lack of curriculum teaching materials and learning resources were the reasons for ineffective implementation of OBC.
- ***Invest into teachers training.*** As teachers need to understand how the SBC works before implementation, there is a need to train teachers on the new curriculum. Teachers' colleges and universities offering teacher education program need to prepare the student-teachers. Thus, there is a need for the government to provide more fund to colleges of education and universities. In-service training in clusters can be used to prepare teachers for the new curriculum.
- ***Review teachers' remuneration.*** It also noted that better incentives and rewards for teachers will enhance teachers' interest to implement new curriculum (Goro, 2012). At the moment, teachers still regard themselves as not compensated well for the amount of work put into teaching.

## Conclusion

Several issues has been highlighted in this paper. It includes changes in the basic education system, curriculum changes, lack of information and awareness, lack of facilities in schools, lack of resources for teachers and students and lack of training and rewards for teachers. Another issue pointed out in this paper is lack of research and evaluation to identify factors restricting proper implementation of the education system. Therefore, the new basic education system, 1+6+6, being advocated by DoE, may be difficult to implement. If the intention is to effectively implement SBC, the DoE should focus on building infrastructures and facilities in schools. Furthmore, more awareness should be carried out and at the same time, produce more curriculum resource materials.

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