

Bachelor of Education (Inservice) Students' Perceptions of Teacher-Centred Instruction and Student-Centred Learning Approaches in Schools in Papua New Guinea

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Abstract

When the outcome-based education got off the ground in 1992 one of the changes it advocated was the change of the teaching pedagogy from teacher-centred to learner-centred. Currently, the question of how effectively teachers will transit from the current traditional practice to the student-centred learning approach still remains a concern. Hence, to investigate this issue, a survey was conducted to elicit the perceptions of the BEd. Inservice-Primary and secondary student teachers of the University of Goroka on the teacher-centred and student-centred learning approaches.

This study revealed three main points. Firstly, despite the fact that teacher-centred instruction has been the teaching approach practiced since leaving college, student teachers are aware of the limitations of this approach. Hence, they feel that the TCI is not relevant for the children of PNG. Secondly, student teachers have a very strong preference for the SCL approach and think that it is most relevant for the PNG children. Thirdly, despite their support for their student-centred approach, many student teachers are not aware of the theoretical and practical implications of the Outcome-based curriculum and have difficulties implementing it. Due to these difficulties, the student teachers indicated that more inservices are needed to be conducted.

Introduction

If a boy needed fish, should his father give him readily caught fish or give him a net and show him to catch fish? (Paraphrased Chinese proverb)

In the last few decades, Papua New Guinea (PNG) has been using a curriculum that was based on foreign beliefs and ideas (NCS, 2002). The notion of this curriculum had been to prepare students for formal paid employment in the urban sector. However, from 1993 figures, Eyford (1993) reveals that less than 10% of the students graduating from schools ever got employment in the urban sector.

Consequently, on many occasions such as addressing school openings, school graduations, newspaper editorials, just to list a few, so much had been said and written against the relevancy of the traditional curriculum. The sentiments shared in these instances had been that the current curriculum is not relevant for PNG students. This has had implications on the subjects taught as well as the teaching pedagogies employed. The traditional approach to teaching and learning that has been in practice in Papua New Guinea (PNG) schools since the inception of formal education in PNG has been the teacher-centred approach. Research evidence describes this approach as that characterized by an epistemology where the teacher is someone who is seen as the source

of knowledge and the learner is someone who is there to gain knowledge not by asking questions but by looking and learning (Guy, 1994).

Guy further stress other attributes of this practice as to cover as much content in a given time so that students may pass exams. At the end of the day whether or not the student learns something is of little concern. Today, this traditional domain continues to impact the contemporary teaching and learning in PNG (Guy, 1994).

Matane (1986), in his philosophy for education emphasizes Integral Human Development (IHD) and states that *“the ultimate goal of this philosophy is for every person to receive an education which results in integral human development”*(p6). Driven by this philosophy the National Department of Education (NDOE) identified and developed a new curriculum, the Outcome-Based Curriculum (OBC) as the most relevant curriculum believed to prepare students not only in their endeavor for a good paid job (Lake, 1993) but also to equip them for lives skills, knowledge and attitudes (NCS, 2002) in their communities after formal schooling. Nari & UOG (2004) describe a relevant curriculum as an appropriate range of learning activities and experiences that suit a variety of post-school livelihood and lifestyles. The outcome-based curriculum strongly advocates a student-centred learning approach. How does this change of the teaching pedagogies implicate teachers in schools?

Problem Description

Many changes occur for the better. Likewise the born of the OBE in the country is a change for the benefit of the children of PNG. According to McNeir (1993) and other advocates of OBE, the outcome-based education specifies the “outcomes” the students are able to demonstrate when leaving the system. These outcomes are derived from what a community sees as the skills and knowledge needed to equip students in-order to be effective adults. Hence, the OBC requires teachers to change their teaching and learning strategies from the teacher-centred instruction to the student-centred learning. However, the question of how proficiently and effectively teachers will change from one pedagogical approach to another becomes prominent. This dilemma enables me to ask the following questions;

- (i) What do the teachers perceive of the teacher-centred instruction and student-centred learning approaches?
- (ii) how easy will the teachers transit from TCI to SCL to effectively teach the children?
- (iii) What are some issues that might affect the teaching/learning style of primary school teachers due to the change in the teaching approach?
- (iv) Is student-centred learning a better learning approach than traditional teacher-centred instruction?

These questions have led me to develop the research topic “student teachers perception of the teacher-centred instruction and student-centred learning approaches in schools in Papua New Guinea”.

Significance of Presentation

As the OBE curriculum implementation has already begun at the elementary and primary level, it is important that issues affecting the implementers (teachers) in terms of teaching and learning at the classroom level need to be highlighted. This will enable policy makers and the monitoring teams at the National Department of Education (NDOE), Curriculum Development Division (CDD) and Provincial Education Board (PEB) to anticipate the limitations of the teachers as the OBE implementation progresses now and beyond.

Aim of Paper

The primary aim of this presentation is to;

- (i) outline student teachers' perceptions of the teacher-centred and student-centred learning and their limitation in the shift from teacher-centred to student-centred approach.
- (ii) outline student teachers' views on teaching and learning during the implementation of the OBC.

Methodology

Eighty (80) questionnaires consisting of Likert-type questions and open-ended items were administered to Bachelor in Education–Inservice Primary (B.Ed.Ins.P) and Secondary (B.Ed.Ins.S) students. The items were structured to elicit information on their perceptions about teacher-centred instruction (TCI), and student-centred learning (TCL), and to obtain their views on the 'full implementation' of the Outcome Based curriculum. Of the 80 questionnaires, forty seven (47) of them were returned. This gave a response rate of about 59%.

Student teachers were chosen as my subjects because (i) they represent the teacher population who are currently implementing the OBC through out PNG, (ii) the subjects happened to be there at my institution which made it easy for me to conduct survey. This enabled a significant response rate, and (iii) the student teachers are perceived to have previous implementation experience from their former schools from which they can reflect and reliably respond to the items.

Questionnaire Instruments

The questionnaire consisted of 3 Likert-scale instruments and 6 open-ended questions. The first Likert-scale instrument was designed for students to respond about their performance on the teacher-centred instruction. The second Liket-scale instrument was designed to elicit student teachers' views on the student-centred learning approach. The third instrument was on teachers' readiness on the implementation of the OB curriculum in schools in PNG.

Five items on teacher-centred instruction (TCI) were administered to examine the perceptions of the student teachers if, (i) they knew the limitations of the TC teaching, (ii) they found TC teaching useful for student learning, (iii) they found TC teaching motivating (iv) they perceived TC-taught concepts easily understood by students and (v) students performed better in tests when taught using TC instructional methods. The

choices of their responses allowed were “always” (5), “usually” (4), “half-the-time” (3), “sometimes” (2) and “never” (1).

Further five items were asked to gather teachers’ perceptions on (i) their awareness of student-centred learning approaches (ii) the effectiveness of student-centred learning, (iii) how easily subject concepts were understood they taught using the student-centred approach (iv) whether student-centred learning was worthwhile and motivating and (v) how students performed in tests.

For the third instrument, five items asked were to elicit student teachers views on (i) how prepared they were to plan and teacher student-centred lessons (ii) the need for extra in-service on the student-centred lessons, and (iii) items 3, 4 and 5 were given to illicit the respondents views on whether there were adequate resources, classroom space and appropriately in-serviced teachers to implement the outcome-based curriculum.

The type of responses allowed for both 2nd and 3rd instruments were “strongly agree” (5), “agree” (4), “not sure” (3), “disagree” (2) and “strongly disagree” (1).

Summary of Results

General Information

A total of 47 students responded to this survey questionnaires where 94% (n=44) of them were B.Ed. Inservice Primary (B.Ed.I.P) student teachers while 6% (n=3) were B.Ed Inservice Secondary (B.Ed.I.S) student teachers. Of the B.Ed.I.P respondents, 75% (n=35) were males while 19% (n=9) were females. All B.Ed.I.S respondents were males. Further, about 70% (n=33) of the respondents are over 31 years old. This implies that they have been teaching for more than 15 years. It is also worthy to note that 83% (n=39) of the student teachers had been teaching at the reformed primary schools (RPS) before taking up studies at the university of Goroka. As most of the participants are B.Ed.I.P student teachers the responses are representative of the primary school teacher population. The general information is shown on Table 1.

Table 1 **General Information showing details of the student teachers**

		BEdInsPrimary	BEdInsSecondary	
Gender	Male	35 (75%)	3 (6%)	
	Female	9 (19%)		
Age	20 - 24	3 (6%)		
	25 - 30	8 (17%)		
	>31	33 (70%)	3 (6%)	
School	NRPS	5 (11%)	NRHS	2 (4%)
	RPS	39 (83%)	RSS	1 (2%)
Grades Taught	E1 - Gr8	3 (6%)		
	Gr 3 - 8	40 (85%)		
	Gr 9 -12		3 (6%)	

*NRPS = non reformed primary school; NRHS = non-reformed high school; RPS = reformed primary school; RSS = reformed secondary school.

Teacher-Centred Learning

Teacher-centred instruction is the traditional educational practice in PNG. McNeir (1993) states that it is centred on “inputs” rather than outputs. One main attribute is that the students are taken through segments of the curriculum over a specified time. During this time, the teacher covers the content prescribed by the curriculum. Other attributes one can notice are that TCI is examination based (McNeir, 1993) and grades are assigned regardless of whether all students have achieved mastery of the material. Most importantly, many students see teachers as source of all knowledge and are not to be questioned (Guy, 1994).

In today’s society, when the economy of PNG has been saturated such that very small number of graduates are absorbed into the workforce, PNG needs graduates who are trained with skills, attitudes and values which will enable them to survive in their community (NCS, 2002). Hence from the results of this study most teachers have realized that the TCI is not capable of producing the skilled students PNG needs today. From the cumulative frequency table 1, the respondents indicate awareness of the limitations of TCI and disagree that the approach is motivating. Therefore they don’t find it useful for student learning.

Table 1. Cumulative Frequency table showing student teachers’ preference for the Teacher centred instruction.

Degree of Preference	Score Interval	Frequency	Percentage (%)	Cumulative Percentage
Always	21 – 25	7	14.9	14.9
Usually	16 – 20	7	14.9	29.8
Half-the-time	11 – 15	26	55.3	85.1
Sometimes	6 – 10	7	14.9	100
Never	0 – 5	0	0	100
	Mean = 14.3 SD = 4.3			

Student-centred learning

Since the OBE got off the ground, teachers have shifted from the teacher-centred to student-centred learning approach. Student-centred learning as opposed to the teacher-centred is one in which the students play an active role in the classroom activities. Yeary (n.d) states that the student-centred education relies on two components; (i) placing more responsibility in the hands of the students and (ii) leaving the teacher to serve as the ‘presenter or facilitator of knowledge’ rather than the traditional source of all knowledge (Guy, 1994). To date, teachers view this strategy as the likely approach that when used effectively will sufficiently equip students to live useful lives. This is indicated in their responses for instrument 2. From the frequency distribution table, most students agree that SCL is effective for student learning and is worthwhile and motivating.

Although this approach is seen as the most relevant teaching strategy this study also shows that OBE being new to most teachers is not used effectively and meaningfully. For that matter, some respondents felt that the University of Goroka (UOG) should develop and offer courses on OBE.

Table 2. Frequency Distribution graph showing student teachers’ preference for student-centred learning.

Degree of Preference	Score Interval	Frequency	Percentage (%)	Cumulative Frequency
Strongly Agree	21 – 25	22	46.8	46.8
Agree	16 – 20	17	36.2	83.0
Not Sure	11 – 15	3	6.4	89.4
Disagree	6 – 10	4	8.5	97.9
Strongly Disagree	0 – 5	1	2.1	100
	Mean = 19 SD = 4.7			

Implementation of the OBC

The results generally indicate that student teachers are not sufficiently prepared to plan and teacher student-centred lessons. Hence they agreed that intensive in-servicing was required to understand and implement the new curriculum. When asked to respond about the essence of resources and classroom space, they agreed that more resources and adequate classroom space were needed for effective and successful implementation.

In other words, they have a high preference for the student-centred learning approach but there are still implementation issues that need rectifying. One teacher states that the curriculum had been reformed but he, as a teacher has not been reformed. In actual fact, the respondent actually implies that s/he lacks the fundamental know-how to effectively implement the reforms.

Table 3. Frequency Distribution graph showing student teachers’ preference for the implementation of the OBC.

Degree of Preference	Score Interval	Frequency	Percentage (%)	Cumulative Frequency
Strongly Agree	21 – 25	0	0	0
Agree	16 – 20	14	29.8	29.8
Not Sure	11 – 15	24	51.1	80.9
Disagree	6 – 10	9	19.1	100
Strongly Disagree	0 – 5	0	0	100
	Mean = 14; SD = 3.2			

Teacher centred Instruction– a culture of teaching and learning in PNG Schools

As TCI had been the instructional approach, student teachers have been exposed to during their teacher training. Further to that, this teaching approach was the approach practiced after teacher training. Consequently, it has become the culture of every classroom in many PNG schools. Based on the information provided, many teachers have been using the traditional teaching approach, TCI for over 15 years.

Difficulties faced by Teachers

After more than 10 years of implementation OBC is filtering up to secondary level and laterally expanding across to all primary schools. During this time, lots of teaching and learning issues have been encountered. Three main issues have been highlighted; planning and programming, assessment and evaluation and teacher-centred and student-centred pedagogies.

Firstly, with regards to planning and programming, the respondents indicated that planning and programming of student-centred lessons have been a big hurdle for them. Specific issues such as lack of understanding of concepts and terms such as strand, outcomes, indicators, etc contribute immensely to their planning, programming and teaching limitations. They also stressed that even if they went ahead and planned, the lack of resources, high teacher-student ratio and classroom space often made it impractical for teachers to teach student-centred lessons.

Many student teachers are of the view that they are not well educated on the OBE advocated assessment system – criterion referenced. The difference between the traditional norm referenced and criterion referenced systems need to be understood before the assessment system is used on students.

It is further indicated that having used the TCI for a long time, it is difficult for teachers to differentiate and plan between the two teaching strategies. However, there is indication that some student teachers have used the both approaches before moving to UOG.

Implications to teaching and learning

The traditional teaching approach – the teacher-centred instruction has become the culture of the classroom, however, many teachers are now aware that the teacher-centred instruction is not relevant for PNG schools. Hence most teachers prefer the student-centred approach.

However, because some schools in PNG are so remote and lack inservicing and resources, hence, there is a possibility that if insufficient inservicing and monitoring is provided by the appropriate authorities, some teachers may continue to use the teacher-centred instruction.

Conclusion and Recommendations

In the light of the question, how do student teachers perceive TCI and SCL in schools in PNG this study revealed that;

- (i) Teacher centred instruction is the most dominant teaching approach in many schools in the country. However, having known the limitations, this approach is less preferred.
- (ii) Consequently, the student-centred learning approach is now seen as the most relevant learning approach for the children on PNG.

- (iii) The study also finds that as the OBE concept is new, teachers are not ready to plan and teach student-centred lessons and require more in-servicing to sufficiently equip teachers.

On those grounds, it is recommended that;

- (i) the NDOE conduct more inservices so that majority of the teacher who are not able to receive appropriate training can be inserviced,
- (ii) Reduce teacher-student ratios so that student-centred lessons can be appropriately conducted
- (iii) Resources very much needed for the implementation of the OBE need to be provided on time.

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