Divine Word University Education Research Journal

Volume 1, October 2017

Contains papers from the 2017 Faculty of Education Research Symposium

Articles

Editorial comment

The Faculty of Education of Divine Word University (DWU) takes pride in presenting this first edition of a DWU Education Research Journal. It contains a selection of papers from the Faculty's inaugural research symposium, which was held on the Madang campus on the 5th October 2017. It is planned for the symposium to become an annual event with a selection of papers to be published each year on the Faculty page of the University's web site, www.dwu.ac.pg. This is part of the Faculty's operational plan to encourage research presentations and publications. The success of the symposium and the collation of papers to be published owe much to the leadership and enthusiasm of Associate Professor Patricia Paraide, who is the Faculty of Education Research Coordinator.

For external readers, it needs to be appreciated that most of the DWU Faculty of Education staff and students are located at teacher education institutions on campuses in Rabaul, Wewak and Mount Hagen with very few staff and students located on the main university campus in Madang (see those locations on Figure 1). High costs of air travel are a deterrent for potential symposium participants outside of Madang. Nevertheless, the inaugural research symposium went ahead in 2017 and it is hoped to become bigger and better each year.

Figure: Map of PNG

Of the papers presented in this journal, one is from lecturers on the Madang campus, one is from a lecturer who travelled to Madang from the St Benedict's campus in Wewak, and the others are from students who were on the Madang campus at the time, studying in the one-year full-time Master of Educational Leadership program. The papers cover a range of topics for contemporary educational issues in Papua New Guinea. It is hoped that readers find the range of articles both interesting and informative.

The Education Research Symposium in 2018 is scheduled for Friday 12th October, and in 2019 it will take place on Friday 11th October. If you are interested in attending or participating in a DWU Faculty of Education Research Symposium, please contact Associate Professor Patricia Paraide, email address pparaide@dwu.ac.pg.

Professor Pam Norman
Editor

Challenges faced by Faculty of Education flexible learning students during study programs

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Abstract

This paper presents some findings of research on the challenges faced by flexible learning (FL) or part time students at the research site. The research site's Faculty of Education offers a range of programs delivered in flexible study mode: Bachelor of Education In-Service (BEd Ins); Post Graduate Certificate in Higher Education Teaching and Learning (PGCHETL); Master of Education Leadership (MEdL) and Doctor of Philosophy (PhD). It has been noted by members of the Faculty that some students do not submit their assignments on set deadlines; some take longer than the prescribed periods to complete their programs, and some withdraw from their study programs. This research explored the factors that lead to these delays and to attrition of students. Mixed methods were used for this research, so both qualitative and quantitative data were collected to inform the research. A questionnaire was administered online and interviews were conducted with students who were willing to be interviewed. Sixty-six current and past students participated in this research. This study found that the major contributing factors to students' late submission of assessment tasks and even withdrawal are: challenges with balancing work and study commitments; internet connectivity issues in the work place; work commitments taking precedence over study commitments; motivational issues; lack of resources to support the study program; lack of feedback and follow-up support from lecturers when students are back in the work place and tuition fees issues. Participants' suggestions for improvement are also presented in this paper.

Key words: flexible learning, learning challenges, support systems.

Introduction

Access to fulltime tertiary education for teachers and other education personnel who wish to upgrade their qualifications for promotional and job requirement purposes is a challenge in Papua New Guinea (PNG). This is because if such group of people cannot secure sponsorship for fulltime study programs then such programs would be too expensive to fund personally. It is generally known that some teachers and other education personnel make personal financial sacrifices in order to acquire their desired undergraduate or postgraduate degrees and they choose to do this through the flexible learning mode. In order to cater for this need, the Faculty of Education at the research site provides flexible or part time education programs to its clients, who are generally teachers, lecturers and other education personnel. It currently offers the Bachelor of Education In-Service (BEd Ins), Post Graduate Certificate in Higher Education Teaching and Learning (PGCHETL), Masters of Education Leadership & Curriculum (MEdL & MEd Curr), and Philosophy of Education (PhD) through this mode. It is also generally known that it is not economical for employers to release their employees for the duration of fulltime programs and therefore opt to provide professional development support for their staff through the flexible learning mode. This is because replacement for personnel taking study leave for a long period of time can cause teacher shortages if replacement teachers are not secured, and therefore may affect students' learning. Furthermore, employers prefer to provide professional development for their staff through the flexible mode because they are only absent from their jobs for shorter durations and are able to implement what they learn in their work place immediately. This study did not establish whether flexible learning programs offered at this research site is less expensive than fulltime programs because that was beyond the scope of this research project.

The Faculty of Education acknowledges that serving its clients during the delivery of flexible learning programs can be challenging. It is generally known that some of the flexible learning students withdraw from studies when financial support becomes too challenging and because of other reasons as well. It is also acknowledged that the challenges faced by part-time or flexible learning students can hinder submission of assessment tasks on scheduled due dates, can lengthen the period it takes to complete various study programs and some may withdraw from their study programs. This paper presents the findings from a research done to establish the type of clients who participate in the Faculty of Education programs, sponsors of their study programs and challenges that they may face in the duration of the various programs so that the Faculty can strengthen its support for them.

Literature review

Literature discussion cited on tertiary students' retention for fulltime and part-time programs show that more students drop out from part-time programs than full time programs (Moodie, 2016). Also both men and women who are self-sponsored and are working to support their studies are most likely to drop out of their study programs especially when work and funding for their study programs become challenging (Moodie, 2016). Other authors such as Eagan and Jaeger, (2009) pointed out that adults prefer to take part-time study programs because of convenience and affordability. This shows that part time study programs elsewhere is less expensive and women and men who have families can align their study programs to their family commitment needs. The latter is generally the case for students with families in this study site. One of the authors of this paper also participated in a part-time study program elsewhere that was half the price of a full time study program. This option was preferable because the family unit was not disrupted in the duration of the author's study program. Other literature also shows that more women take part-time courses than men. Literature also shows that when students are supported well during their study programs, they are most likely to complete their programs successfully. For example, there is evidence from a number of institutions that a range of proactive support strategies such as phone calls, email and even postcards have improved retention rates of 5% to 40% (Simpson, 2010). Other authors such as Chu, Abella and Paurini (2013) also pointed out that when supporting indigenous students in their study programs, it is important to acknowledge that family support and personal commitment to the successful completion of their study programs. They also pointed out that the creation of learning village or community in institutions' setups, and being respectful and nurturing in relationships with students can create a sense of security and acceptance that is generally missed with the absence of family and community support at tertiary institutions.

Such support can enhance their motivation to succeed in their study programs. In addition to that, they stress that the acknowledgement and recognition of the students' cultural identity, the need for staff to support their values and aspirations, and the willingness in creating the indigenous way of physical spaces to allow students to grow and reflect can enhance students' retention. They also pointed out that both part time and full time students' completion rates can be enhanced when management is able to:
- incorporate students' learning needs in the institution support systems
- insist on students' performance to high standards
- promote learning relationships between students and mentors as a learning relationship
- provide a stable level of institutional support for students' welfare
- provide active institutional engagement with the community
- provide strong and supportive institutional leadership
- have significant indigenous role models in the learning institutions.

Some tertiary institutions in New Zealand such as the University of Auckland, Manukau Institute of technology and a private education provider Best Training Limited are already providing such student support service for their students (Anae, Anderson, Benseman and Coxon, 2002). The research site can learn from their experiences so that it can strengthen support for its students

Methodology

Mixed methods were used for this research. An online questionnaire was administered to participants who represented all programs (except for PhD) offered by the Faculty of Education. Interviews were conducted with some of the participants. The purposive sampling was used to select the participants and the research site because a particular group of participants was needed to inform this study. They were the Faculty of Education tertiary students who have completed their education program and those who are currently doing their programs through the flexible learning mode. Also this sampling method was chosen because of time and financial challenges. Additionally, the participants were willing to participate in this research and they were within easy access to the researchers. Most of the data was collected through questionnaires and interviews from participants during the residential sessions while some were emailed to the participants who had completed their programs. Sixty-six participants returned the questionnaires. Sixty participated online while six filled in hard copies of the questionnaire, which were later added to the Google forms for data organization and analysis.

Participants

Education officers such as teachers, inspectors, provincial and district education personnel are encouraged to participate in tertiary studies by the Government of PNG and donor agencies in recent years. Both men and women are encouraged to upgrade their education qualifications. However, it is generally known that women's participation in tertiary programs especially in full-time ones is lower than that of men's. It is also generally known that women's enrolment in flexible learning (FL) programs ten to be higher than that of men's. It is also generally known that women especially those who are married with children and single mothers are able to participate in flexible learning or part-time tertiary programs. This is because they are able to leave their families for only a short period of time in order to participate in scheduled face to face sessions. Information was collected on the participants' gender. Even though Graph 1 does not show the portions of single women and married women among the participants, it does show that women do participate in part-time tertiary programs in the study site. This suggests that women are able to participation in tertiary level education programs in this case maybe because they are away from their families only for a short period of time. More information on the participants is presented in Graph 1.
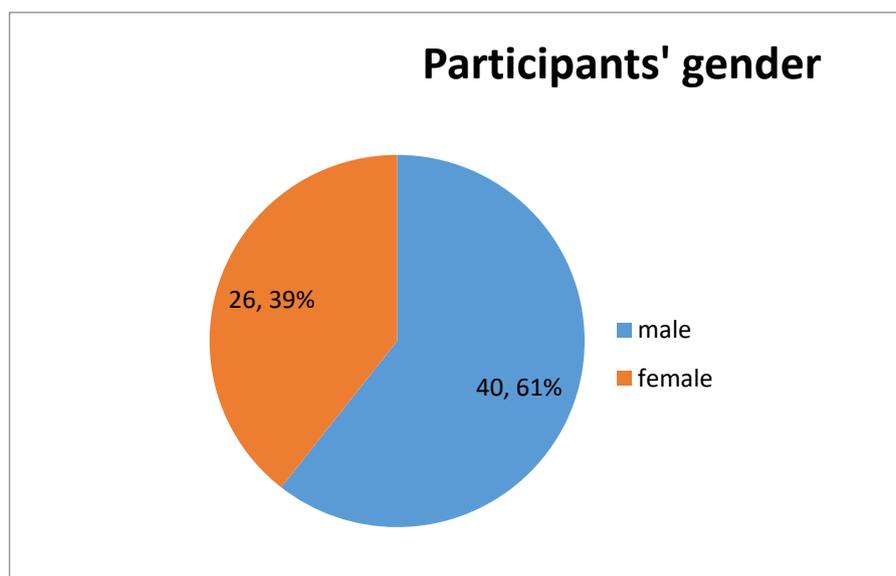

Graph 1: Participants' gender

Teachers, lecturers and other education personnel of all age groups are encouraged by their employers to take additional tertiary education programs for promotional and professional development purposes. Information on the participants' ages was collected in order to establish the ages range of

students who participants in the study programs. It was found that the ages of participants vary. It is generally anticipated that the younger population range are most likely to take advantage of improving their academic qualifications. This is supported by the data in Graph 2. However, the data also shows that those in the older age range also participate in the flexible learning programs. This suggests that there may be a market for tertiary education programs for the older population in future because they may now have the time and financial support to pursue higher qualifications. This view has also been suggested by Dame (2013) that part-time students were the only group who viewed their chances of obtaining a degree to increase with age. More information on the participants' age range is presented in Graph 2.

Participants' age range

Age range	Count
20-24	2
25-29	17
30-35	17
36-40	10
41-45	11
46-50	4
over 50	5

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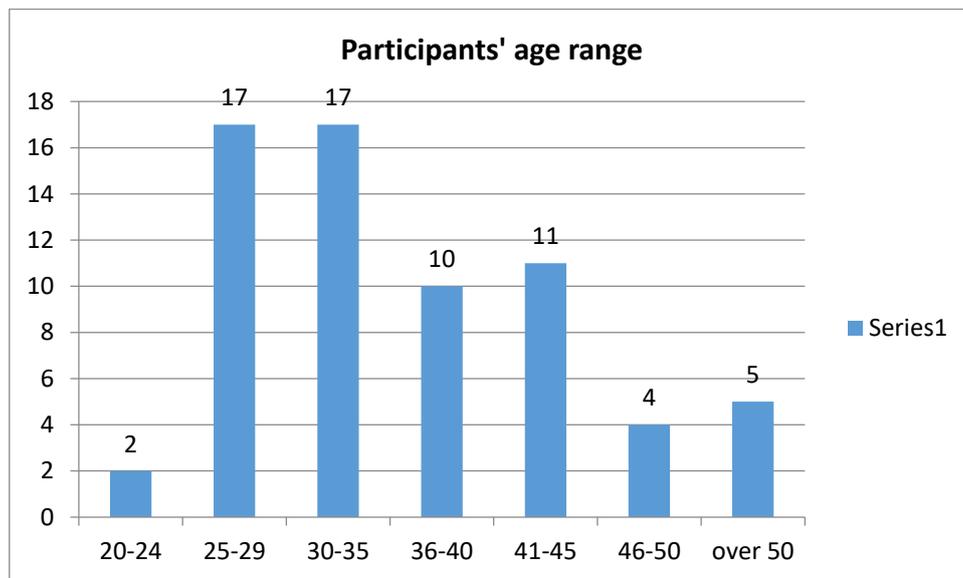
Graph 2: Participants' age range

The teachers' and other education personnel's employers encourage them to upgrade their education qualifications, but generally do not sponsor all of them in their study programs because this can be a costly exercise. Therefore, some of those who cannot secure sponsorship for their study programs decide to make personal financial sacrifices in order to participate in the programs through the flexible learning mode. This study did not establish the number of women compared to men who are/were able to make such sacrifices. This could be the focus of future Faculty of Education research projects. It was found that a significant number of participants are/were self-sponsored. This shows that employers' support in terms of sponsorship for their staff's professional development is less than 50% at this stage, even though it is generally known that they encourage their employees to upgrade their qualifications, with the expectation of improved productivity level in their work place when they complete their study programs. The data also suggests that some education personnel are determined to advance their academic qualifications and therefore make personal financial sacrifices in order to achieve their goals. Graph 3 presents more information on the participants' sponsorships.
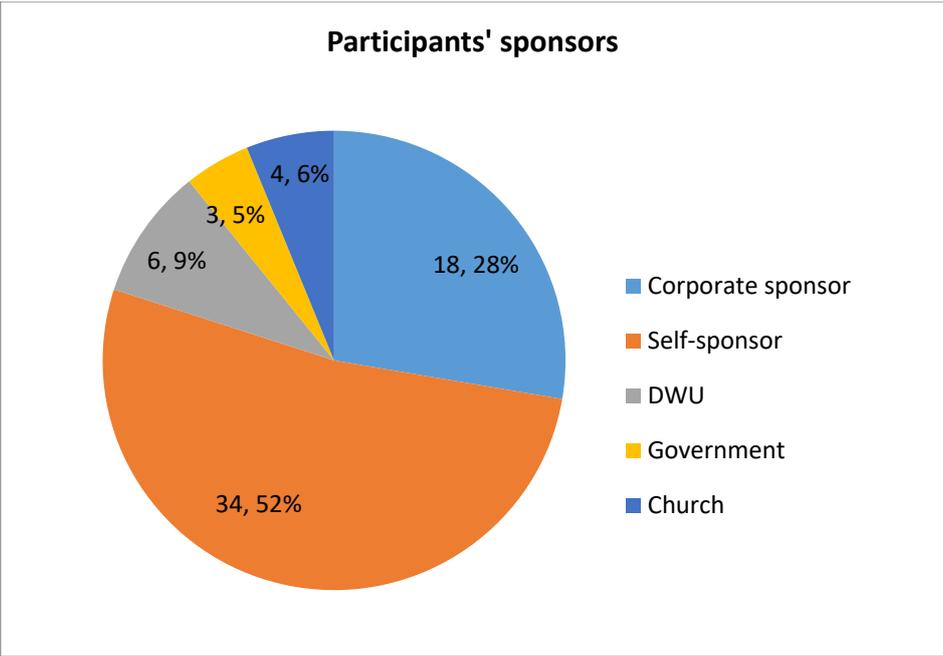
Graph 3: Participants' sponsorship

Participants' level of study program

The Faculty of Education offers various study programs to its client. Currently, it has been observed by the Faculty of Education academic staff, that there are more students enrolled in the Bachelor of Education program. This is supported by information in Graph 4. Another program that seems to be gaining an increasing interest is the Masters of Education Leadership program as shown in graph 5. This program generally serves senior education personnel clients. This may suggests that this group of officers take this program because such qualification is now a job requirement and also for desired promotional purposes. More information on the current flexible learning students is presented in Graph 4.
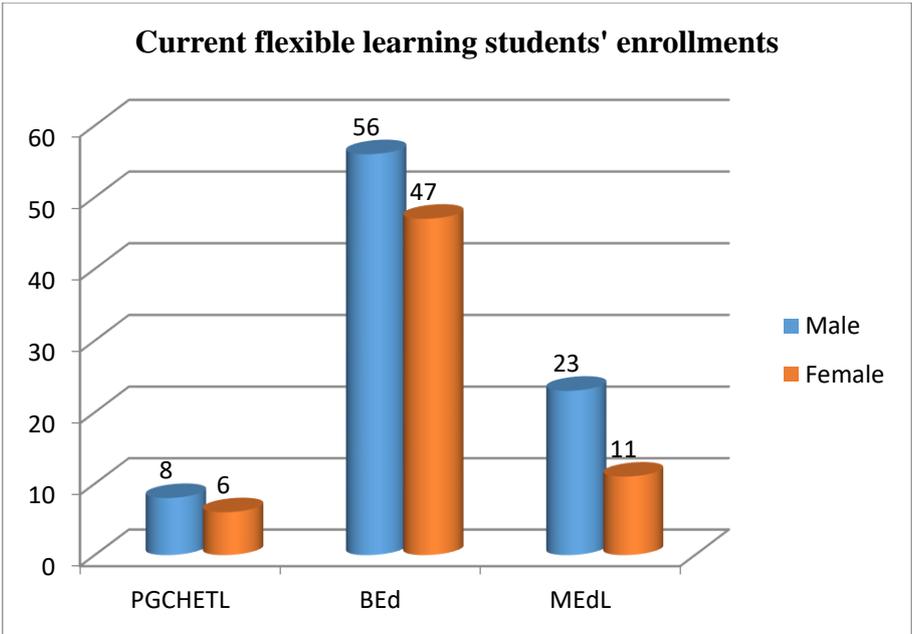
Graph 4: Current flexible learning (FL) students' programs' enrolments
Source: 2017 DWU Faculty of education database

As discussed earlier, the participants take various flexible learning programs at the study site. They were asked about the levels of the study programs that they took/are taking. The Bachelor of Education had the highest number of the participants, followed by Masters of Leadership program as discussed previously. This study could not establish why these two programs attract more student enrolment but it can be suggested that this may be because of job requirements and future promotional aspirations. Graph 5 presents more information on the participants' study programs.

Participants' program levels

- Bachelor of Education
- Post gradaute diploma in education
- Post graduate certificate in higher education teaching and learning
- Masters of Education (Leadership)
- Masters of Education (Curriculum)

28, 43% — 26, 40% — 2, 3% — 4, 6% — 5, 8%
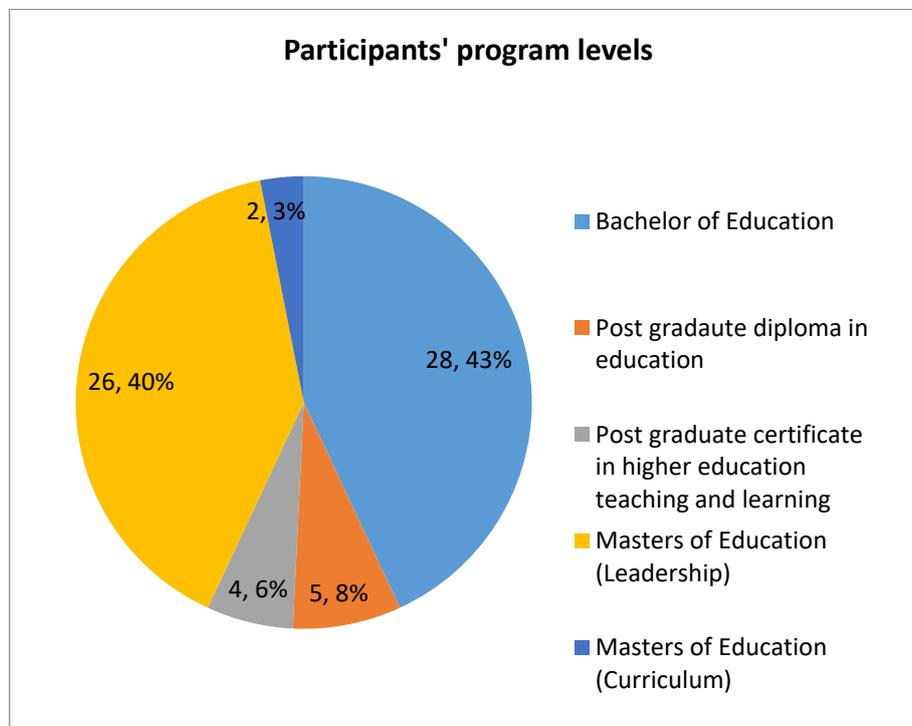
Graph 5: Participants' program level

This data suggests that the most popular Faculty of Education flexible learning program currently, is the BEd program followed by the Masters of leadership program. Other data in the study show that most of students have primary teaching backgrounds who wish to gain their first degrees. Some also pursue or are pursuing a post graduate degree through the flexible learning programs. This may suggest that more students may continue to enrol in these two programs for some more years in future especially if this research site improves its support for students' learning.

Place of Work

The Faculty of Education flexible learning students work in different provinces around PNG. Some provincial education administrations support their staff well by allowing them to participate in their desired study programs. Some also support some of their staff through sponsorship of their study programs. The data shows that the largest numbers of the participants work in the Madang and East Sepik provinces. This suggests that participants who work in these two provinces are better supported in terms of exemption from duties for a short period of time to allow them to participate in their study programs. This may also indicate that the employers in these two provinces sponsor the participants' study programs as well. It may also suggest that these participants' study programs may be sponsored by other organisations. It may also suggest it is less expensive for participants to travel in for their residential sessions from these two provinces. It further suggests that some of them may not have to spend on accommodation costs because they have their own, and those from the East Sepik Province may be supported by family and friends. Graph 6 presents more information on the participants' provinces work location.

Participants' provincial locations of work

Legend:
- Madang
- East Sepik
- Morobe
- West Sepik
- Eastern Highlands
- Simbu
- Western Highlands
- Southern Highlands
- Hela
- Jiwaka
- National Capital District
- Western
- Milne Bay
- East New Britain
- New Ireland

Data labels shown: 1, 2%; 1, 1%; 2, 3%; 7, 11%; 17, 26%; 4, 6%; 1, 1%; 3, 5%; 1, 1%; 2, 3%; 3, 5%; 5, 8%; 1, 1%; 6, 9%; 12, 18%
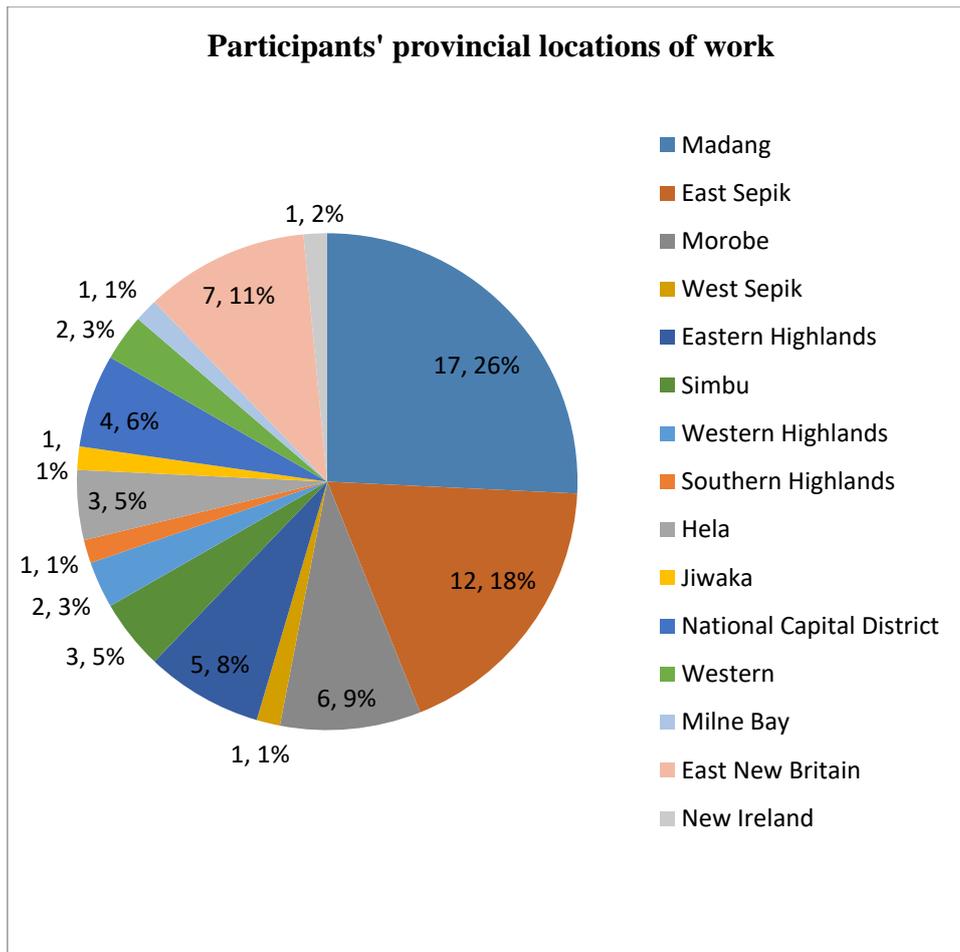
Graph 6: Participants' provincial location of work

Reasons for not submitting assignments on time

Flexible learning students in tertiary learning institutions worldwide face various challenges in the duration of their study programs and students deal with these in different ways. Students who are self-sponsored are more likely to drop out of their study programs because they participate in extra work in order to earn their tuition fees and therefore may not be able to submit their assignment tasks on time. Others have family commitments and still others face difficulties in balancing work and study commitments as discussed by Moodie (2016). This study found that a few flexible learning students always submit their assignment tasks on time. This group of students is part of the group who participated in the PGCHETL program and their program is sponsored by their employer. However, many more in this group and those in other programs face challenges in submitting their assessment tasks on time. The following are reasons provided for not submitting assessment tasks on time: balancing work and study commitment is difficult**;** connectivity and internet issues**;** work commitment**;** motivational issues**;** lack of resources**;** tuition fee issues**;** and immediate and extended family commitment.

Reasons for late submissions

|	
■	Connectivity Issues (internet)
■	Work commitments
■	Balancing work and study time
■	Motivational issues
■	Lack of resources
■	School/tuition fee problems
■	Family commitments
■	Never submitted late
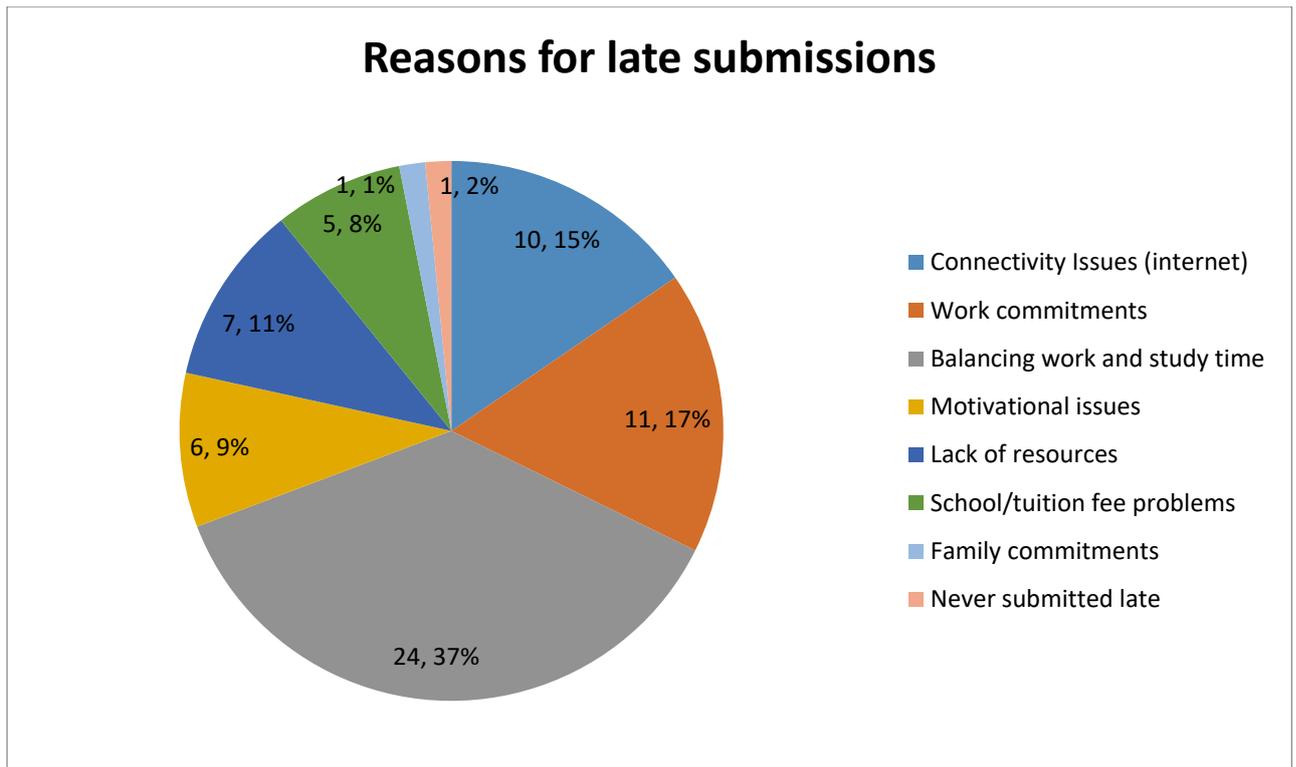
Graph 7: Reasons for late submissions

The participants were requested to provide additional information on why students had difficulties in meeting assessment task submission deadlines. Again, it was found that only a few students always submit their assessment tasks on time. These few students are from the group who participated in the PGCHETL program. Again, the majority of the participants had difficulties in meeting assessment task deadlines.

The major contributing factors for this are:
- difficulties in balancing work and study commitment
- connectivity and internet issues especially for those in rural locations
- nil or minimal communication with DWU especially to those in rural locations
- financial difficulties to support tuition and other related expenses
- issues with setting work, study and family priorities
- lack of appropriated resources to support their study while back in the work place especially for those in the rural areas
- lack of motivation during the program.

Graph 8 presents additional information on why students have difficulties in submitting assessment tasks on time.
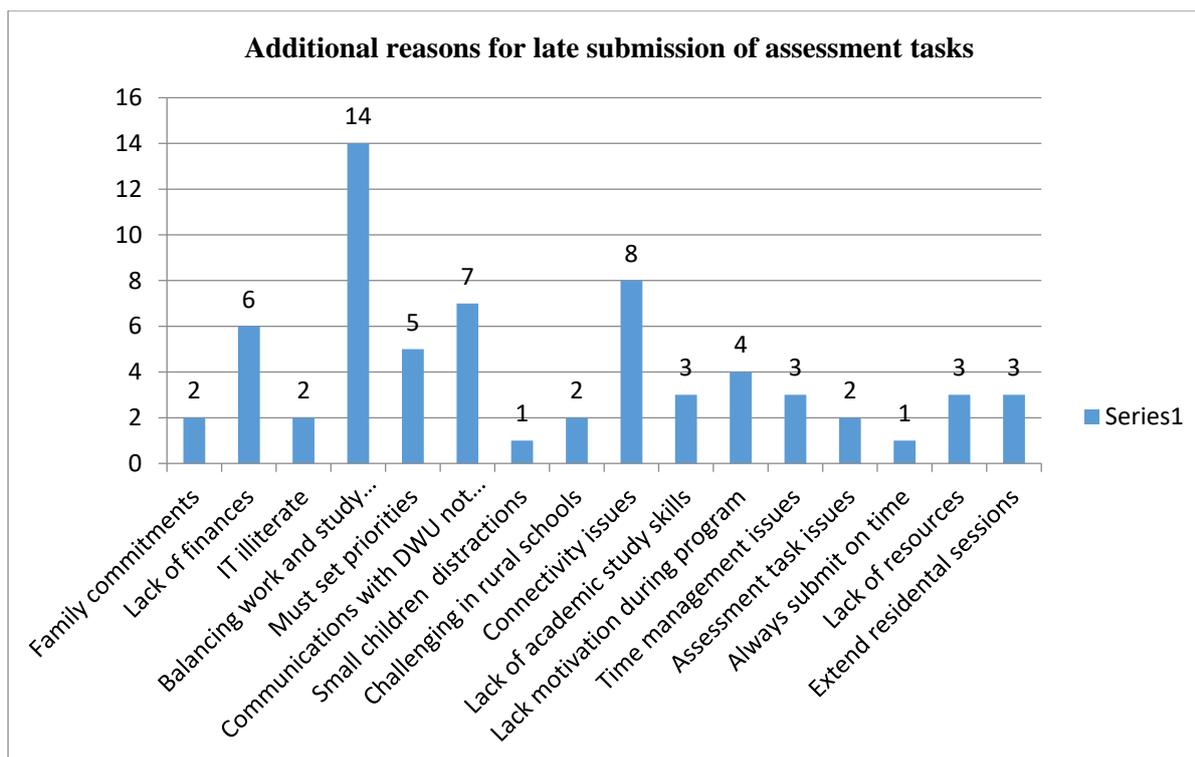
Graph 8: Additional reasons for submitting assessment tasks late

Reasons for withdrawal and non-completion of programs in prescribed duration

The participants were asked to provide additional comments about the challenges they face in the duration of their study programs in the interviews. It should be pointed out here that the set of data represented here represents only one particular program group of the participants and therefore it presents only a glimpse of the participants' challenges, so it must be read with some caution. Interview data from the other program groups are not presented here because of various challenges such as loss of interview data and time constraints to interview students during the residential sessions. The data shows that some of these participants took longer than the prescribed period to complete their study programs for various reasons. However, they persisted until they completed their programs. The data shows that lack of family support and support from the institution were provided as reasons for this. One participant withdrew from the program because of health issues. Other data in this study also show that the inability to pay for tuition fees also contributed to withdrawal from study programs.

Participants Interview excerpts

Participant 1

> *It took me six years to complete my MEdL program. I did not get feedback from my lecturers on my assessment tasks... I was just told I passed my units...no evidence...some of my submitted assessment tasks was lost by the lecturers and FLC staff. They could not find them, so they asked me to resend them. This was difficult because my laptop was stolen and I lost everything. I was angry ...I threatened to take the university to court for this... but my colleagues (name given)... he took eight years to complete his study program. He is graduating with me too. He also had similar problems and experiences as me. I cried a lot ... on many occasion because of anger...you know men are not supposed to cry... but I did...when I received ... this notification that I would graduate... I cried again...but this time it was because I was happy. I was beginning to think ...I will never graduate. Now I will get my piece of paper tomorrow. My children are proud of me...*

Participant 2

It took me five years to complete my MEd (Curr) program. My husband was not really supportive so I struggled with that... I did not receive feedback on my other assessment tasks to help me improve in other assessment tasks...For some units...I was just told I passed...I did not see my marks... not even my submitted assessment tasks... All I got was a mark for them... ... this is not good...I wanted to know...how I was doing...to motivate me... Then I met you (referring to interviewer) *in 2015... you encouraged me to complete my studies... always gave timely feedback... then my laptop was stolen ...while I was passing through from here to Port Moresby and home ... I lost everything... I gave up hope ... I told you about this... you encouraged me not to give up...but I did... You kept on... emailing me...passing on messages to people who knew me... made phone calls...I did not answer them...you wanted to know... how I was going... then you refused to support me anymore. I came back to this Campus... asked to continue... was told ... you ... I wanted was not willing to support me anymore... I still decided to see you personally ...had to humble myself...this was hard for me ... I know you were angry...but ...I know you were disappointed with me...but... also know that you would feel sorry for me...When I walked into your office...you told me off* (laughing)*...you* did not want to see me*...* (laughing)*... told me ...I let myself down more than you. I just sat and listened... you asked me what I wanted from you. I asked you to support me again... You agreed but... you said on the condition that I stop giving excuses for not working...I promised that I will...thank you for that... Now I am happy because I am graduating tomorrow.*

Participant 3

For me ...we have heavy workloads here just like you (referring to interviewer)*...we have to teach, mark students' assessment tasks... we have very little time to commit for study... after work and on weekends...most of us have family to care for too...we need to care for them you know...do shopping, care for the children...we need time for ourselves too... just to get away from work for a little while... it is difficult...work and study...we need to balance...commit time...but this is hard...we have to complete at the end of 2017...but this is hard...*

Participant 4

Like my colleagues, I value this program because it is paid for by our employer...I am motivated to complete this program but I have family problems... and I am not familiar with the use of ICT things... I get others...my daughters to assist me with email...PowerPoint presentations... I have not submitted some of my assessments tasks for ... units I took in 2016 ...I am not really familiar with sending emails... and attaching files...I am slow to learn ICT skills... I am not sure when I will complete all my assessment tasks... not sure now...

Participant 5

I want to withdraw from this program because this is too much... my husband is away...I am caring for my children and I have health issues...I have this issue a lot...I am worried about my health... so I will withdraw from the program ...but my health is worrying me...(this participant's study program was sponsored).

Participants' recommendations for improved students' support

The participants were asked to provide suggestions for improvement in term of support for their studies during their various study programs. The majority of the participants recommended that support for students' learning in the duration of their various study programs should be strengthened.

These included suggestions for the:
- teaching of academic writing skills, referencing, and various computer skills during the residential sessions
- teaching of skills in order to access information from databases from the Friendship library and in the work locations during residential sessions
- provision of sufficient resources for students to work with after residential sessions and especially to those in remote locations
- provision of clear instructions on what is required for assessment tasks during the residential sessions
- lecturers' provision of timely and meaningful feedback on marked assessments tasks
- continuous communication for encouragement purposes to students after residential sessions
- continuous reminder of assessment task deadlines after residential sessions
- provision of extensions on set deadlines of assessment tasks submission dates when needed.

Literature cited suggests that some institution lack appropriate support for its part-time students as highlighted by Bower (2001). Other literature also shows that better communication with students can improve some of these challenges (Simpson, 2010; Chu, Abella and Paurini, 2013 and Gibbs and Kale, 2017). It should be stressed that when there is better communication with students, assessment tasks submission deadlines can be extended for students when it is requested for, but this should be granted for genuine reasons only. Such requests have to be supported by relevant documentation. Another common recommendation was that the residential sessions be extended to two, three or four weeks. The most common length suggested here was the extension from the current one week to three weeks. Similar students' recommendations were discussed by Gibbs and Kale (2017) in their research report and they suggested that this recommendation could be explored further and considered as a possible solution to support flexible learning students. A further common recommendation was that students should set their own priorities in order to cope better with their work, study and family commitments. This could be the focus of discussion support between lecturers and students during the residential sessions. Some students need such discussions so that they may be able to set family, work and study priorities when they return to their locations. Graph 9 presents additional information on the participants' recommendations for improvement.

Participants' recommenations for improvement

- Extend residental sessions
- Students must set priorities
- Programs discentralised
- Strengthen support for students' learning
- Strengthen students' time and management skills
- Assessements tasks planned well
- Lower tuition fees
- Improve communication on tuition fee status
- Response not clear

1, 1%
1, 1%
2, 3%
3, 5%
4, 6%
7, 11%
7, 11%
2, 3%
39, 59%
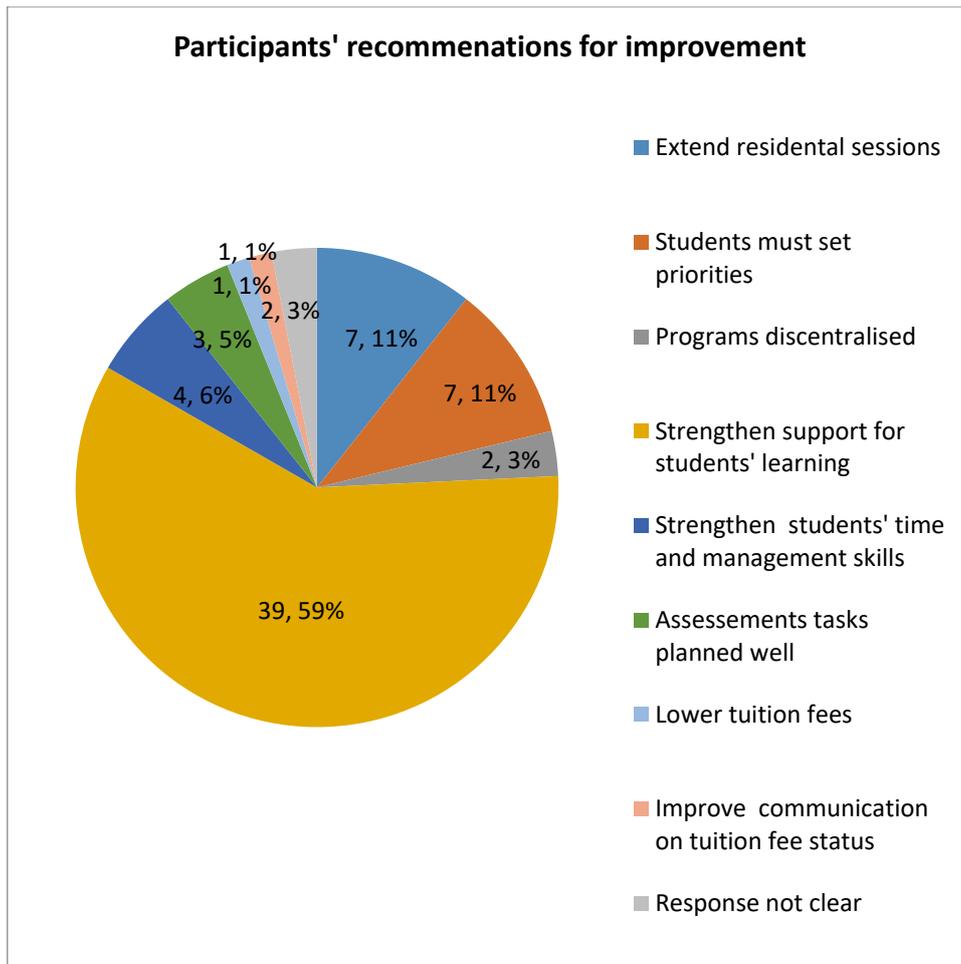
Graph 9: Participants' recommendations for improvement

Conclusion

Various research literature cited show that more part-time students generally drop out of their study programs than fulltime students. Lack of students' support and inability to continue with paying for their own tuition fees are generally presented for part-time students withdrawing from study programs. Also more women withdraw from their study programs than men. Working part-time and time management are generally suggested for students being unable to submit their assignments on set due dates. It is generally acknowledged that when students are supported well during their study programs they are most likely to complete their study programs successfully.

The Faculty of Education at the research site offers various tertiary education programs to its clients. The study was conducted to establish a general background of the participants, and the challenges they encounter during their study programs. It was found that most of the participants are men; most are between the age range of 25 to 45 years; more than 50% of them are self-sponsored, most work in the Mamose Region, and they face challenges during the duration of their various study programs. The participants are of the view that they face challenges with:

- securing financial support for tuition fees and other related expenses especially for those who are self-sponsored
- subject content offered within just one week of the residential sessions
- access to appropriated resources to support their study while back in the work place
- connectivity internet issues both in rural and urban locations but especially so in rural areas
- effective communication with DWU support and academic staff
- balancing family, work and study commitments.

The participants are also of the view that if these challenges are addressed, they may find it easier to cope with part-time studies. The concerns raised by participants are faced by both fulltime and part time students the world over. Literature shows that some learning institutions have addressed these issues in order to strengthen support for their students with some success.

Recommendations

That the Faculty of Education seriously assesses the students' recommendations for improvement and identifies practical support strategies to addresses them appropriately.

That the Faculty of Education seriously assesses the students' recommendations on the possible extension from the current one-week residential session to three weeks to allow sufficient time for students to receive the support they need before they return to their homes and work locations.

That lecturers strengthen current practices on the provision of timely and helpful feedback on study tasks and assessments.

That further research be done on effective support systems for part time students by the Faculty of Education.

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Teacher retention in East Sepik primary schools

Erita Yawi

Abstract

Preparing primary schools teachers to teach in primary schools around Papua New Guinea (PNG) is an expensive and challenging exercise for the PNG Government. It has been generally observed that it is difficult to retain teachers because they move on when they are offered better paying jobs. The PNG teaching force loses some committed and effective primary school teachers this way. Teachers plan and prepare daily lessons in line with curriculum principles and work towards achieving the expectations set by the school and the education system as a whole (Farrant, 1980 & National Department of Education (NDoE), 2009). Teaching loads and welfare demands and challenges have influenced some teachers to leave the teaching profession. This creates a shortage in the primary schools' teaching workforce. A mixed methods approach was employed in this study of teacher retention of primary teachers in East Sepik Province and twenty four teacher participants who have been teaching for one to six years were selected for this research. The findings show that teachers face a variety of challenges while teaching. Some of the key challenges are: lack of knowledge and skills for classroom management and administration; low salary; poor teachers' welfare; and lack of confidence in teaching little children. It was found that despite these key challenges the teachers were willing to continue their career in the teaching profession. This paper supports recommendations presented in other research in this area that the teachers' salary and welfare and other issues should be seriously considered and addressed by the PNG Education Department so that teachers, especially the committed and effective ones, are retained in the teaching profession.

Key words: Teacher retention, primary school teaching, East Sepik Province

Introduction

Teachers enter the teaching profession after graduating from teachers' colleges throughout the country. Most teachers enter the teaching profession for the first time and may encounter challenges. For most teachers it is a transition period for them that is from college to work. They walk into a school environment with the preconception that everything would be fine for them. The challenges they experience may be different depending on the schools they are teaching in. Establishing relationships and other networks can be difficult. Having access to necessary government services would be in accessible and that can test their patience, sense of self and sense of belonging. That can have an impact in their teaching performance as a result the authorities can be disappointed about their commitment, performance and professionalism. It is common for first time teachers to experience stress and anxiety as they try to put theory into practice while going through the process of settling into working life, sometimes away from their families and in unfamiliar settings. Teachers have reported facing unexpected challenges and struggles at their respective primary schools and, sometimes, leaving the profession they have trained to enter.

This study explored factors influencing primary school teachers to be retained at the lower primary level in East Sepik primary schools. The factors identified can better prepare them to be resilient in the face of challenges and to identify essential support services for those facing difficulties so they are retained in schools.

Literature review

In a global context the education system and structure differs greatly across countries. In the developed and well advanced nations their education system is likely to be very competitive

compared to under develop and developing countries like Papua New Guinea. Generally, in most countries the education system consists of two major areas, one is the education structure and the second is the curriculum.

Papua New Guinea has an education system that is compulsory and free, but not everyone has access to education most likely in rural PNG. PNG is implementing Outcomes Based Education (OBE). The education system has 3, 6, 4 structure that is three years of elementary education, 6 years of primary and 4 years of secondary education (National Department of Education (NDoE), 2009). The Outcomes Based Curriculum is now used to teach in all levels of schooling. After secondary education the successful students go into tertiary education including University. Those who drop out of the formal schools' system are enrolled in informal school system then make their way to tertiary education or into the vocational schools where students were taught skills oriented jobs such as carpentry, electrical, mechanic then they move on to seeking employment in the labor market (NDoE, 2009, 2000).

It is at the secondary level of education, students decide their career pathway either to enter universities or to colleges such as schools of nursing, primary school teachers' colleges etc. Those who applied to teachers' colleges should meet a certain required GPA in-order to enter teachers' colleges and graduate at the end of two or three years with a diploma in primary teaching (UNESCO, 2011). When students apply for teachers' college their GPA should be 2.5 at an average or over for their school's fees to be subsidized by the National Department of Education (NDoE) those students who scored lower 2.5 to 1.9 GPA would pay their own schools fees and enter the teachers' college as self-sponsored students. They can always go under HECAS if they meet the required GPA of 2.5 in the preceding years.

Teaching in primary schools can be fun and challenging to deal appropriately with young children. Primary school teachers work hard to develop schemes of work and lesson plans in line with curriculum objectives (NdoE, 2000). They facilitate and promote learning by establishing a relationship with young pupils by the organization of learning resources and making the classroom learning environment more conducive for teaching and learning (Farrant, 1980; NDoE, 1986).

> "Primary school teachers develop and foster the appropriate skills and social abilities to enable the optimum development of children, according to age, ability and aptitude. They assess and record progress and prepare pupils for examinations. They link pupils' knowledge to earlier learning and develop ways to encourage it further, and challenge and inspire pupils to help them deepen their knowledge and understanding".
> Retrieved from (http//www.prospects.ac.uk/primary school teacher.)

In PNG education structure teachers teach in 2 different levels in primary schools and these are lower primary, grades 3-5 and upper primary grades 6-8 (NDoE, 1986; NDoE, 2004. The National Curriculum Statement for PNG (2003) highlighted the Outcomes Based Curriculum (OBE) contents/overview appropriate for each grade level. It describes what the curriculum is designed to be achieved by all students in PNG. Primary school teachers are doing their best to cope with challenges in primary school teaching. Challenges include changes in curriculum objectives, the education restructure and the Outcomes Based Curriculum (Agigo, 2010, NDoE, 2004; NDoE, 2009). These hinder teacher progression and productivity of quality education because teachers are less informed and prepared to implement OBE and other changes. Having limited knowledge and experience drags effective implementation of changes in the education system. Teacher would be over worked with work assuming that they would be rewarded at the end but to no avail (Agigo, 2010). As a result, most teachers leave the profession to find better jobs with good pay and working conditions.

Retention of teachers

Retention of teachers in schools can be a major issue across the globe. A number of Research conducted by VSO (2002; 2003; 2008, VSO Education 2007-2012) in most developing countries in

the world revealed a number of significant issues that affect teachers in a global perspective. Thus, research in the developed world like the USA has identified similar issues but appropriate for their context (Buckley, Schneider & Shang, 2004; Ingersoll, 2001). Both qualitative and quantitative approaches were used to collect and analyzed data that highlighted some of the main issues faced by teachers. VSO (2003) pointed out that, "Education enables individuals to meet the challenges in society today. For developing countries with limited educational resources, teachers are the sole learning resource in schools, making their contribution, if possible, even more critical than in richer countries. With the position of school becoming more embedded in society, the role that teachers play is essential, and this is in addition to the many other roles they fulfill – as role models, counselors, health workers, agents of change etc." (p. 16). Teachers play mixed roles of education and in educating children in schools.

Factors influencing teacher retention in PNG and Internationally

VSO's (2002) research that explored in depth, the causes and effects of varying levels of teacher motivation and performance amongst high and secondary school teachers in Papua New Guinea (PNG). Using a range of surveys, the research sought answers to teachers' level of motivation and the critical factors that influence the level of motivation in teacher performance in PNG high schools. These are the themes that came out clear from the teachers' voices

- Lack of voice in decisions affecting them
- Poor administration and management
- Teachers don't feel enabled to perform well through over work and lack of staff development
- Teachers don't feel justly compensated, incentivised or given fair conditions (p.3).

These are issues that teachers feel have negative impact on their teaching performance and retention in schools (VSO, 2008; 2002). Ingersoll (2001) is engaged in America Education Research in his results of analysis showed that "teacher turnover is a significant phenomenon and a dominant factor behind the demand for new teachers and the difficulties schools encounter adequately staffing classrooms with qualified teachers" (p. 5). Qualified teachers can leave the classrooms in PNG if there is lack of morale and motivation at the workplace. Teachers concerns must be heard by the education authorities at the provincial and national level. This factor can highly influence teacher retention.

Housing conditions

Housing conditions, salary and training are other factors that hinder teachers' morale and motivation (VSO, 2008; Civil Society Coalition on Education for all, (CSACEFA), Kwara, 2003). Teachers are seen walking out their classroom doors without giving a second thought to the actions undertaken. VSO's research conducted in most underdeveloped countries in the Asia Pacific region using surveys revealed that;

> (VSO, n.d) the global crisis in the teaching profession is ongoing, not only with a shortfall of between 14-22 million teachers worldwide[3], but also with existing teachers who are poorly trained and managed (if at all), who can barely survive on the low salaries they are paid, and who as a result suffer poor morale and low motivation. In some countries such as Guyana this is leading to high teacher migration in many countries, children as a result are not receiving quality education (p.7).

This is happening to countries who are neighbors to PNG so it is likely for PNG to face challenges to retain its teachers in the PNG Education system. The factors of low salaries and poorly trained officers are currently affecting the education system as many teachers are disappointed and are leaving teaching for other jobs with better terms and conditions of employment in PNG (VSO, n.d). In the National Newspaper of Papua New Guinea Thursday, May 8, 2014, it was stated that;

Housing is one of the most important necessities for workers, next to salaries, according to an economist. Employers need to work out ways to try to provide housing where they can but the private sector is also a major part of the solution when it comes to building larger quantity of housing, not just for their own needs but for investment (p.15).

This is exactly what the teachers in PNG are experiencing with housing. If provided, houses are of a low standard. In other parts of the region, for example in a study on teacher motivation in Sub-Saharan Africa, not all teachers are provided with housing and this discourages teachers from remaining in the profession (VSO, 2002). To keep teachers on the job and for the children's education, proper houses must be provided for teachers.

Teacher training programs

Teacher training programs should cater towards meeting the needs of the student teachers. What programs offered at the college must be practical in real teaching situations. (VSO n.d) stressed that "Teachers are not trained properly in teachers' college throughout the country. Facilities are outdated and lecturers are not qualified are some factors that contribute to poor training in teachers' colleges" (p.2.) VSO (2008) pointed out that the "quality of teacher training dictates the quality of teaching…When teachers are not adequately trained; children are denied their right to a quality education" (p.11). However, VSO and Education (2007) has worked with teacher institutions in several countries including PNG to improve teachers' education institution. VSO has worked and is continuing to supply expertise from the developed nations to work with teachers' colleges throughout the Asia Pacific region to help make changes to the curriculum offered in Teachers colleges. To align it well so it prepares student teachers to fit into the teaching profession after graduating. On the same note VSO is working closely with lecturers to equip them well to implement the curriculum in teachers' colleges (VSO Education, 2007-2012). Teachers are not trained well can be one of the reasons for them to face challenges at the work place. They are likely not to perform well and can affect quality education on the school system.

Shortage of curriculum materials and other resources

Curriculum materials are the basic instruments used in schools by teachers to plan lessons and teach (Yoko, 2005). If for any reasons these materials and other resources are in shortage in schools over the years, teachers may face challenges of quality planning and delivering of specific contents for subject areas. VSO Guyana (n.d) in a research on making teachers count voices and views from the classroom identified various factors such as lack or no proper curriculum and other teaching resources is a demotivator to teaching. It makes teaching and learning difficult as teachers cannot interact actively with students. Teachers' perceptions of their working environment are affected by the lack of level of instructional resources available to them. A supportive workplace provides the curricular infrastructure teachers need to teach effectively. Material resources are needed to give life to curricular standards and to support instruction. However, many lack adequate material or support to successfully implement a standards-based curriculum (Johnson, 2006). Furthermore, VSO (2002) states that; "There is frequently a dramatic lack of teaching and learning materials in the schools. Shortage of curriculum material is a big problem to most PNG school regardless of where the schools are located. This is because schools lacked proper management of curriculum materials (Kukari, 2012). As a result, teachers do not plan well before delivering lessons and that the children face the consequences (VSO Guyana, n.d). Curriculum and other resources materials supplement and promote teaching and make learning more meaningful and exciting. With non-availability of such materials hinders quality teaching by teachers.

Additional school facilities

Having appropriate and conducive working environment for both teachers and students contributes to effective and efficient teaching and learning with-in and outside the classroom. The condition in which the additional schools facilities are contribute and foster teachers teaching performance. Both

teachers and students will be motivated and excited to work exposing enthusiastic behaviours. However, this is not the case in most schools in the pacific region. Buckley, Schneider and Shang, (2004) building from teacher retention literature suggested another factor on the quality of school facility stated that many factors clearly affect teacher retention and as teachings are done in specific physical location and the state or the quality of that building affect teacher performance, morale, health and safety of the teacher. Apparently, (VSO, n.d) highlights that;

> Teachers' working environment affects their ability to teach and has an impact on children's ability to learn. Additional school facilities, such as adequate toilet facilities and in some school staff quarters, are vital to sustain the motivation levels of teachers. School facilities at present are variable; conditions are often difficult and teachers are working in poorly ventilated, dusty classrooms with inappropriate space and, at times, furniture. Living conditions, especially for teachers in rural areas, are poor with limited staff quarters available (p.7).

VSO (2008; 2002) and VSO and Education (2007), in various research topics in PNG and other developing countries identified similar sentiment either in Asia and the African countries that the working conditions of teachers are also poor. "Many cases classrooms are dilapidated with leaking roofs and broken windows, classes are cramped and there are barely blackboards or desks. Added to this there are often not enough staff to fulfill the teaching duties, which creates extra work along with more multi-grade teaching for teachers in post ''(9). In a discussion paper in PNG on Teacher appointment by Kukari et al., (2012) identified that teachers are posted to schools where the school physical appearance especially the classrooms and teachers houses do not motivate them to take up the teaching positions as a result they leave the schools and do not return.

Student behavior and over-crowded classrooms

Student behavior is likely to be affected because of over crowdedness in some classrooms in schools. Over crowdedness in the classroom occurs because of high enrollment of students and no teachers in the schools. Another factor identified by (CSACEFA) Kwara, 2013) is lack of teacher in schools that led to combination of large classes and this is over-crowding of children in the classroom. Children can be attending schools but the nature of quality education is questioned as there are too many children in the classroom and only one teacher to teach. In addition to that is student behavior and class control, only one teacher cannot deliver quality teaching to many children. Ingersoll, (2001) also highlighted that teacher dissatisfaction of job is due to student discipline. Student behavior is a factor that contributes to teacher retention in the developed countries and this is also the case in PNG (Kukari, 2012).

Job satisfaction:

Job satisfaction in the teaching profession as well as in other fields is "multi-faceted and is composed of a range of factors including teachers' salaries, working conditions, pupils' performance, work colleagues, status in the community, and the complexity and stress of the job" (Garett, 1999, p. 6). Job satisfaction encourages and motivates teachers to be retained in their job. In PNG it is difficult to measure job satisfaction as not much research is done to identify factors that highlight job satisfaction. From the outer image teachers display attitudes of job satisfaction by been in the profession for approximately more than 10 years but who knows how much effort is put into quality teaching and learning. It can be assumed that teachers are retained due to seeing teaching as means of earning a living or it can be suggested that their reason for choosing the profession is as a job factor or fit (Singapore). In PNG, the level of job satisfaction displayed by teachers either it is high or low and can be identified through factors that sustain the level of job satisfaction. Job satisfaction in teaching is an area yet to be researched in PNG.

According to Garett (1999);

> Satisfying factors are those intrinsic to the job such as achievement, recognition by superiors or peers, the work itself, responsibility and advancement. Changes in these factors, it is claimed, produce long term changes to job attitude. Thus, satisfaction with the intrinsic features of a job is long lived and therefore, likely to sustain a worker over a long period of time (p, 7).

These factors are intrinsic to the job and can be of job satisfaction while other factors can be of job dissatisfaction and are extrinsic to the job such policy matters and administration, supervision, curriculum changes, education restructure, salary, interpersonal relations and working conditions. Changes to these features of the job tend to be short lived and therefore removing dissatisfaction is of less importance in the overall life of the teacher (Garett, 1999). Therefore, job satisfaction can be a factor that influences teacher retention.

Community engagement and interest in teacher performance

Local communities in which teachers serve can encourage teacher retention. The commitment and support they give to teachers in terms of kind gestures, caring attitudes, respect for teachers and sharing of items externally motivate teachers to perform well in teaching. VSO Guyana (n.d) stated that the effort the community and other stakeholders contribute in helping teachers and students leads to quality education in schools. Similarly VSO and Education (2007) and Ingersoll (2011) highlighted that schools and the wider community need to support children, to feel included as part of their children's education and to assist teachers to implement changes in the classroom in order to help promote quality teaching and learning. However, the head teachers interviewed stated that community engagement in supporting school activities is lacking. Parents showed lack of interest in what the teachers and children are doing in schools. This attitude displayed by parents demotivated and discouraged teachers to work well and teach effectively. On the other hand, it discouraged children learning as parents are not taking an active role in encouraging their children's learning. In studies in PNG (Kukari, 2012; Kukari et al., 2012) it is significantly true that there is limited contributions to children's learning by parents otherwise there is no support at all. This depends on the type and location of schools in the country. It can be noted that both children and teachers are affected by the lack of support given to them by the parents and the wider community.

Salary and working terms and conditions

Salary and working term and conditions of teachers contribute significantly to high performance of teaching duties and responsibilities. Teachers should be paid well and accordingly depending on where they teach. For teachers teaching in most remote rural schools, certain consideration should be taken into account for the remoteness of school. Salary rate should be adjusted to meet the demands and needs for the teachers as the schools are isolated in the context of PNG. Teachers are likely to leave the teaching profession for various reasons but one burning reason can be poor salary and working terms and condition. Relatively low salary is a factor for teachers turn over in most schools in Washington (Buckley et al., 2004). A report by New York City Council Investigation Division about teacher attrition and retention highlighted that teachers were leaving teaching due to showing dissatisfaction in salary and benefits while new teachers expressed dissatisfaction with the availability of instructional materials and supplies and big class size (Gioia, Boyland, Martinez, Liu, & Vallone, 2004). Teachers in the developed countries are expression dissatisfaction about salary and this is actually happening in PNG. However, the PNG government is trying its best to raise teachers' salary and working terms and conditions.

The literature review has examined and defined various aspects of factors influencing teacher retention in schools. It also discussed challenges experienced by teachers in primary schools. This literature has helped me understand the issues that challenge and can sustain teachers to remain on the job. Teachers in western countries are experiencing similar kind of challenges like PNG teachers however; the context is not the same. In Asia pacific region the literature also highlighted those

challenges and how the teachers are affected as PNG because PNG can share the similar cultural backgrounds as the teachers in the Asia Pacific region. Teachers can despite challenges live and work to teach the children of Papua New Guinea. This has made me to research teacher retention in PNG primary schools.

Methodology

The mixed methods approach was used in this study. The research instruments used to collect data were the questionnaire and focused group interview. A random sampling was used to select schools and participants for the research. The rural school selected was accessible by road to and fro. The three urban schools were selected among other urban schools because of accessibility. From the three schools selected all lower primary teachers were invited to voluntarily participate in the study. There were twenty-four participants, 8 from the rural school and 16 from the urban schools. The participants signed the consent forms to participate in the research. All the 3 interviews were conducted for an hour during the participants' non-contact hours from 3:30-4:30 pm. One urban school did not take part in the interview but responded to the questionnaire.

Questionnaire was the other data collection instrument. It consisted of open and closed ended questions for the participants to respond to. Thus questionnaire did not give much opportunity to participants to further express their ideas it restricts them only to the number of items on the questionnaire. The completed questionnaires were collected from 3 urban and 1rural school.

This study was small and the results captured factors of teacher retention of only those who participated in the study. Therefore, the findings cannot be generalised about other provinces.

Findings

Theory to practice

The findings of this study concerns factors influencing teacher retention in primary schools in the East Sepik Province. There were interesting differences of factors depending on where the teachers were teaching. The number of years of experiences also affected the findings to my study. All the participants both in the urban and rural schools stated that theory was not the same as practice. Regardless of the number of years teaching, they shared their experiences of their first years of teaching. All of them stated that what they learnt at the college was not the same practically in schools. For example, Sammy in the findings mentioned that the approach the lecturers taught her to teach language was not the same as what she experienced practically. Mai also highlighted that lecturers did not demonstrate and taught him the appropriate teaching strategies used for teaching. He experienced challenges in teaching strategies when he went out teaching in schools but after some years of teaching experience he was able to develop teaching skills. This finding ties in well with VSO (2008, p. 11) states that "quality of teacher training dictates the quality of teaching…when teachers are not adequately trained; children are denied their right to a quality education". On that note, the teachers colleges in the country should now work hard to raise their standards in the programs offered and recruiting of qualified lecturers for quality of program delivery.

Classroom administration and management

The participant generally shared their first few years of experience teaching experiences. From the findings one other most common challenge was classroom administration and management. The participants lacked proper knowledge of how to administer and manage the learning environment and the children in their classroom. That generally affected their teaching. The teachers experience reflects the teacher education program. VSO (2008), identified that teachers were not trained well in at teacher colleges. This is because of having unqualified lectures teaching at teachers' college. It can be assumed that if the teachers were taught well at teachers' colleges they would administer and manage

their classes well. However, the Voluntary Services Overseas is working to improve the standard of teacher education program in the Papua New Guinea.

Curriculum materials

From the findings it is evident that most teachers from the rural school stated that limited curriculum materials hinder proper planning and teaching of lessons. The teachers stressed that the possibility of having shortage of curriculum material is due to high enrolment of children in a class, lack of stock take to monitor the issue of curriculum material and teachers walking away with the materials end of any academic year. The findings illustrated there was no quality planning and delivery of teaching context. Yoko (2005) stated that curriculum materials are the basic instruments used in schools by teachers to plan lesson and teach. For any reason if the curriculum materials and other resources are not available it is a de-motivator to teacher. Further still, teaching materials are needed to give life to curricular standards and to support teaching instructions in school (VSO, n.d). It is noted in my study that only the rural teachers stressed on the shortage of curriculum materials for teaching and learning than the urban teachers. It is likely that the urban schools have enough teaching materials and resources to use to achieve the education department's expectations.

Teachers' welfare

From the quantitative data a few more challenges were encountered by the teachers. One of the significant finding was that the teachers' welfare was not well taken care of by NDoE. 54% of the participants stated teachers living conditions needs improvement so that teachers are happy to do their job. Teachers' welfare is crucial for quality delivery and implementation of the education policies. VSO in their various studies (2007, 2002) in the Asia-Pacific region identified that teachers' welfare includes housing, salary and training hinders teachers' moral and motivation to work. Teachers feel been labored by the government, they have not been rewarded well in terms of their welfare. So much stress is put on teachers to facilitate and implement the new educational changes in the structure, curriculum and policies and yet teachers' welfare is at stake.
However, 83% of the participants mentioned that children had well-built classrooms for teaching and learning. It can be noted that the school's administration and the NDoE can afford to cater for better classrooms for the children and no better homes for teachers to live in. There should be a compromise between the two so that both teachers and children are housed well.

Students' discipline

The findings displayed that 54% of the participants indicated that students lack discipline. They do not behave well and listen to teachers during class times. Children misbehavior hinders and affects learning in class. Kwara (2013) overcrowding in classrooms causes discipline problem. There can be children in class but the quality of teaching is not evident when children misbehave. Ingersoll (2001) added that teacher job dissatisfaction is due to student discipline. Teachers can become frustrated and angry if there lack of discipline in children. Children discipline is a growing concern now in most PNG schools. Student discipline problems do not only affect teachers; they affect other children's learning too. Children cannot learn well in a noisy and crowded environment. The NDoE should look into minimizing the discipline problem by reducing the class sizes in schools.

School facilities

In two different instruments on the questionnaire teachers were asked to indicate on the Likert scale their choices of having library and computer facilities at the school. 66% of the teachers mentioned that there was no library for staff and students to use at their schools. 79% of the teachers highlighted that there were no computer facilities at their schools. For better and more quality learning a library with updated books for teachers and students to use are required. To increase literacy rates in PNG, children need to read more books that further enhance their learning. Teachers have to build more content knowledge to different subject areas so books are needed and have to be kept in a library. On

the other hand, in today's computer world children have to computer literate in order to compete with the changing world. Computer literacy is needed for both teachers and children. Schools should seriously think about building libraries and computers laps and stock them with the required materials.

Thoughts of leaving the job

Teachers were asked if they were thinking of leaving the teaching profession. From the qualitative data all the participants responded they were not thinking of leaving the job. Even though they have encountered challenges in the teaching profession, they love the job and enjoyed teaching the little children. Tina in her first teaching said she just started and will continue even though she experiences challenges. Jane said that she was not thinking of leaving the job. However, teachers did mention that some teachers have left the job in the past due to problems of teachers' welfare, parents' negative attitudes, poor salary and NDoE denying entitlements. As for the 24 participants they are not serious about leaving the job as yet. The participants were in 0-6 years of teaching experience so it can be too early for them to decide to leave.

Conclusion

The study explored the factors affecting teacher retention in primary schools in the East Sepik province. Four schools were used, three urban schools and 1 rural school. Only one rural school was used due to financial constrain. There were twenty-four participants, 8 from the rural school and 16 from the urban schools. Their participation was voluntary and their stories had brought to light some of the main factors that affected teacher retention in the East Sepik Schools. A mixed method approach was used to collect data and data analsyed demonstrated that various factors affected teachers while in the teaching profession. Factors affecting teachers were similar to literature done in the Asia Pacific region and also research done locally in PNG. Some of the factors are putting theory into practice, classroom administration and management, curriculum materials, teachers' welfare and students discipline are amongst the many that demotivated and discouraged teachers to be retained in the profession that they have been trained for. The key finding in this study highlighted that despite these challenges love of the job and teaching little children made teachers to stay on in the teaching profession without thinking of leaving the job. The participants in this study were in zero to six years of teaching experiences so it would be too early for them to decide to leave the teaching profession. They feel that teaching is fun as they deal with little children who are excited to learn. It can be suggested that factors affecting teachers to be retained on the job, can be challenging to the teachers but their love for the job retained them in the profession.

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To cite this article

Language skills learning challenges in Grade 9

Henry Baining

Abstract

The purpose of this research was to explore teaching strategies that are used by English teachers to develop listening, speaking, reading and writing skills of grade 9 students who do not have English as their first language. It aimed to identify assessment strategies currently used to measure students' progress and discover the resources used to develop grade 9 students' learning of the basic language skills in English. Interestingly, grade 9 students of two secondary schools were the focus of this study because of their transition from primary schools to the secondary school level at which their mastery of listening, speaking, reading and writing in English is generally observed to be below the desired expectation. Grade 9 English teachers of the two selected secondary schools also participated in the study because of their involvement in scaffolding students (Bruner, 1975 as cited in Larkin, 2002). By employing the mixed methods and the concurrent triangulation approaches, questionnaires were delivered to both groups of participants; teachers and students, to collect quantitative data, while lesson observations and document analysis of artefacts was carried out to collect qualitative evidence for the study. The findings have shown that grade 9 students in the two schools have always been encouraged to interact in English by their teachers. However, class discussions and the students' participation in group or pair discussions during English lessons needs to be encouraged. The lack of textbooks, library books and other resource materials were among recommendations given by both group of participants in the study.

Keywords: language skills, receptive skills, productive skills, Papua New Guinea, lower secondary, teachers' commitment, English textbooks

Introduction

The mastery of speaking, reading and writing in the English language can be challenging for students who do not speak English as their first language. Something needs to be done about the development of students' listening, speaking, reading and writing (literacy) skills in the English language in lower secondary schools in the Papua New Guinea because they need these skills in order to perform well academically in formal education. The Papua New Guinea Vision 2050 (2009) under Education section 1.17.2.2 affirms that by 2050, all PNG citizens should be literate. In Papua New Guinea, English is not most students' first language (mother tongue). They learn English in formal school.

The purpose of this discussion is to highlight the teaching strategies that are used by English teachers to develop listening, speaking, reading and writing skills of grade 9 students who do not have English as their first language. A recent case study was carried out to identify and discover the resources used to develop grade 9 students' learning of the basic language skills in English. Interestingly, grade 9 students of two secondary schools were the focus of the study because of their transition from primary schools to the secondary school level at which their mastery of listening, speaking, reading and writing in English was generally observed to be below the desired expectation. The study was carried out with the intent to inform language policy-makers of existing research and current practices in teaching and learning in a second language. The study anticipated a well-informed interpretation that would add information to current discussions and debate on the teaching of English as a second language.

This paper discusses briefly some key international and national literature on teaching strategies used by English teachers to teach the basic language skills in English and the challenges faced by students

when learning the four language skills. The key research findings will be discussed in detail in the body of this paper.

Literature review

According to Harmer (2007), teachers talk about the way language is used in terms of the four skills – reading, writing, speaking and listening. These, he continues, are often divided into two types: *Receptive skills* refer to reading and listening skills where meaning is extracted from the study, while *productive skills* refer to speaking and writing skills where students have to produce language themselves (Harmer 2007). Hinkel (in Harmer 2007) further points out that these skills cannot be talked about in isolation. In a conversation, both speaking and listening take place, otherwise there will be no interaction in this activity. Likewise, writing cannot be done in isolation (Harmer 2007). It rather goes hand in hand with reading. Davies (1976) distinguished between three major stages of knowledge of a foreign language at least when applied to learners beyond childhood.

Harmer (2007) in his fourth edition of "*The Practice of English Language Teaching",* points out clearly that receptive skills and productive skills feed off each other in a number of ways. For example, teachers frequently ask students to listen to something and take notes. They might ask students to give an oral or spoken summary of something they have read. Thus, what students say or write is heavily influenced by what they hear and see (Harmer 2007). In real life situations outside the classroom, we rarely use one skill on its own.

Moreover, the students' sound mastery of language skills in a second language is dependent on the quality of teaching and assessment of their language skills (Short & Echevarria, 2004). Some English language learners may demonstrate discrepancies between their oral and literacy skills in English depending upon their educational and cultural background. Some students may also understand more English when they listen or read than when they speak or write or vice versa.

Nonetheless, teachers play a very vital role in the English language skills learning of grade 9 students. They tend to mirror their own learning preferences in the teaching approaches they bring to the language classroom, unless these are overridden by the way they themselves were taught. This is particularly true for teaching assistants, if they receive little formal training in methods before they start to teach (Oxford & Lavine, 1991).

Methodology

The research used the mixed methods whereby questionnaires were administered to collect quantitative data while lesson observation, document analysis and artifacts were used to collect qualitative data. The descriptive case study was engaged to describe the development of the four basic language skills in grade nine in two secondary schools. The study employed the purposive sample under the non-probability sampling because the sample used was similar to many secondary school environments around PNG. This would imply that even though the sample size was small, some generalizations can be made in this regard. Additionally, the sample allowed the researcher to have easy access to the research site and research participants given the time constraints for the study. A total of 47 grade 9 students from two secondary schools and their two English teachers were the participants of the study.

Findings

Information was collected from participants on the teaching strategies that are used to develop students' listening, speaking, reading and writing skills in grade 9. Teaching strategies were explored through a questionnaire on how students practice the four English language skills in the classroom with lesson observations carried out by the researcher to ascertain these strategies. The findings have revealed that students in grade 9 found the environment in secondary schools to be somewhat demanding than at primary schools and hopeful that teachers would have been more committed to

support them. Coupled with the shortage in educational resource materials for teachers and students, participants of the study expressed their views on what needed to be improved in the learning of English in their respective schools. By analyzing the research data collected, the following were found to be of significance and worth discussing.

Listening practice

There are several ways in which listening skill is practised by grade 9s in secondary schools. Teachers are guided by resource books such as the Lower Secondary School Syllabus and the Teacher Guide which comprise language teaching strategies that are prescribed in the language curriculum for Papua New Guinea. This is generally effective because the writing of the language curriculum is informed by research. In this particular study, participants were given three listening strategies and were asked to indicate the strategy that was used most often in their respective schools. Their responses are shown on the table below.

Table 1: Students' responses on how they practice listening to a text read

Participants	Listen to the teacher	Listen to radio /TV	Specific passage read by a friend	Total
School A Students	15	5	3	23
School B Students	16	3	5	24
Total	31	8	8	47

This data suggests that the dominant teaching strategy used by grade 9 teachers to teach listening practice to students is listening to the teacher read an English text. This data is supported by the lesson observations conducted by the researcher as seen below.

Researcher: What I saw during the two lesson observations was the teacher reading an English text in front and students listening attentively. I did not see the students listening to a radio or television and students listening to a specific passage read by a friend because these strategies were not planned for the observed lessons.

Speaking practice

When asked on what grade 9 students do most often to practise their English speaking skills, 40 student-participants indicated that they practised this skill by speaking with friends in the classroom. Their responses are shown below.

Table 2: Students' responses on how they practise speaking in English

Participants	Speaking with teacher	Speaking with friends	Speaking outside the classroom	Total
School A Students	5	18	0	23
School B Students	2	22	0	24
Total	7	40	0	47

This data suggests that the dominant strategy used by grade 9 students to practise speaking in English is speaking with friends. This data is supported by the lesson observations conducted by the researcher as seen below.

Researcher: During the lesson observations I saw students speaking English to each other in the classroom when asked by their English teacher to practise speaking. However, when walking around the school grounds, I heard grade 9 students speaking either Pidgin or the local vernacular in spite of the fact that speaking English is one of the school rules. There

were a number of notices placed in the classrooms, and on noticeboards as reminders for students to speak English every time they are in the school premises. I also saw that only two or three students in each grade 9 class have the courage to speak English to the teacher. Others when asked, they tend to scratch their head, a gesture that they do not want to speak in case they make mistakes and their friends will laugh at them.

Reading practice

Both groups of participants were asked to indicate what students do most often to practice reading in English in the school. About 42 of the student-participants from both schools altogether specified that they practiced reading most often by reading silently as shown below.

Table 3: Students' responses on how they practice reading

Participants	Reading aloud	Reading silently	Reading in groups	Total
School A Students	0	22	1	23
School B Students	1	20	3	24
Total	1	42	4	47

This data suggests that the dominant strategy used by grade 9 students to practice reading is reading silently. This data is supported by the lesson observation notes presented below.

Researcher: I noticed that grade 9 students were encouraged by their English teacher to read silently when given a text to read for understanding. A great challenge here however, was when two or three students were told to read silently using one textbook. I saw every third student in a group of three pretending to be part of the group but doing something else instead of reading silently.

Writing practice

The participants gave information on what students do most often to practice their writing skills in English. The findings show that students practice writing most often by free-handwriting in class. Tables 4 below provides more information on this.

**Table 4: Students' responses on how they practice writing**

Participants	Grammar Exercises	Free-hand writing in class	Homework	Total
School A Students	0	19	4	23
School B Students	4	16	4	24
Total	4	35	8	47

This data suggests that the dominant strategy used by grade 9 students to practice writing in English is free-handwriting in class. This data is supported by researcher's lesson observation notes as seen below.

Researcher: During the lesson observation I saw that students were writing a lot even while the teacher was presenting the lesson. I also had the chance to glance through a few of the students' exercise books and saw that the students tried their utmost best to practice writing and master their handwriting in class. Due to the fact that there was a shortage of textbooks, students were not allowed to bring textbooks home. And so the poor students had to copy the lesson notes and activities from the textbooks as well as the blackboard to their exercise books.

Teachers' commitment

Information was collected from participants through an optional open-ended question on what they would recommend to be improved in the teaching of the four English language skills in their respective schools. Here are what three student-participants wrote about the attendance, punctuality and lesson delivery of their English teachers:
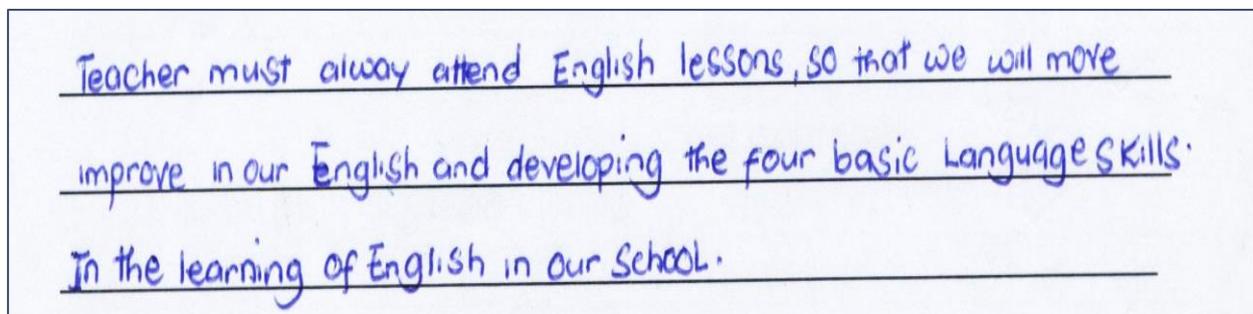

Figure 1: School A Student 1 - remarks on teachers' attendance
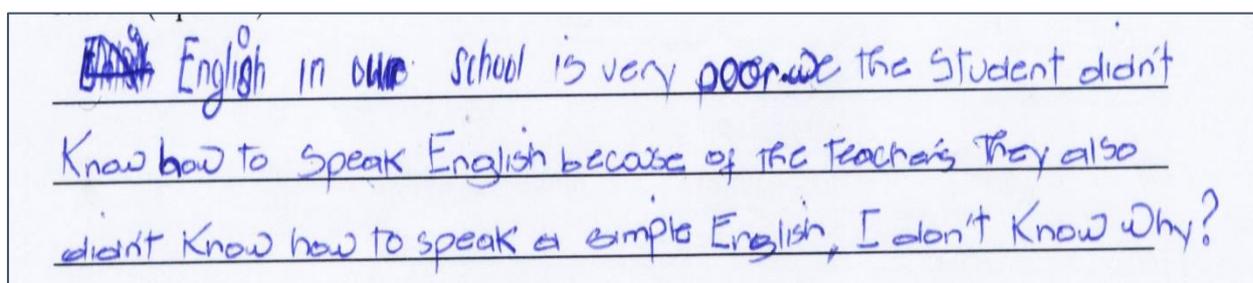
Figure 2: School A Student 2 – remarks on teacher as role model
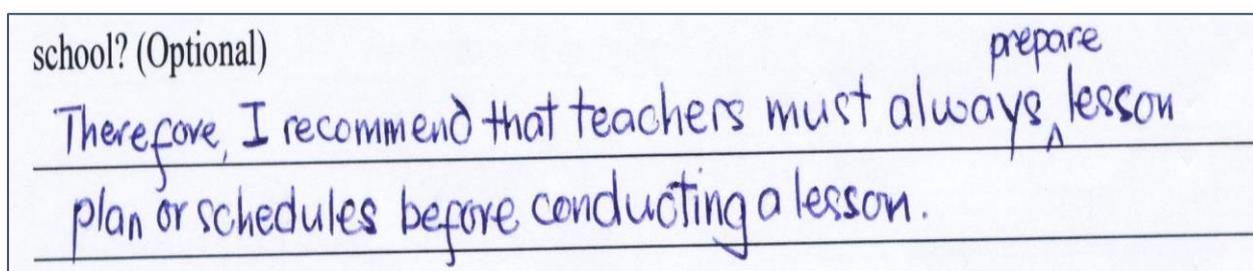
Figure 3: School B Student 1- remarks on teachers' lesson preparation

These qualitative data suggest that there was a lack of teacher commitment on their part in delivering English lessons. From the data, it was obvious that even grade 9 students could tell whether their teachers prepared the lessons well or not. Regardless of their incorrect sentence structure and grammatical errors, the three participants above expressed their concerns on different areas that they wished to be improved on the part of their English teachers. This data is supported by the researcher's remarks as seen below.

> *Researcher: What struck me here is the fact that Question 24 of the questionnaire was an optional open-ended question and the participants had the choice whether to answer it or not. However, 12 students from School A and 15 students from School B wrote similar remarks like the three students' responses scanned and presented above. They could have left this question out but they saw the need and they responded hoping for improvement.*

Availability of English resources

Information was also collected from participants on what they would recommend to be improved in terms of teaching and learning resources as aids to their mastery in the learning the four English language skills. Here are what three student-participants and a teacher-participant wrote about English resources:
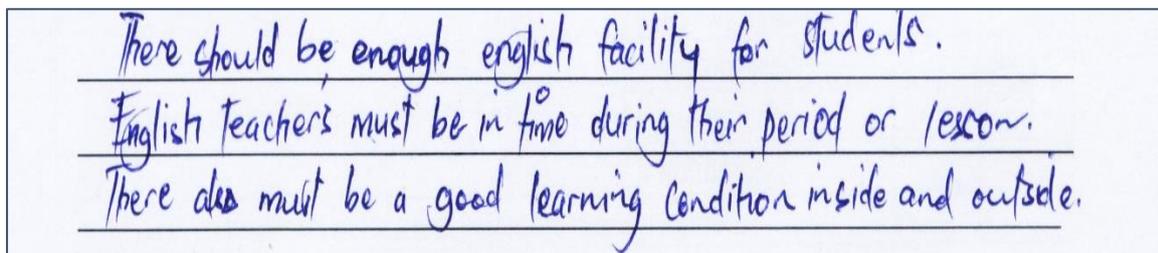
> There should be enough english facility for students.
> English teachers must be in time during their period or lesson.
> There also must be a good learning condition inside and outside.

Figure 4: School B Student 2 – remarks on English resources and teachers' punctuality
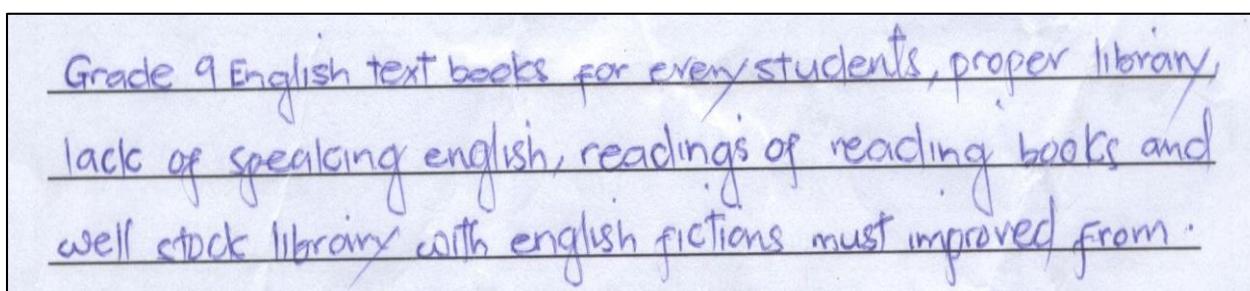
> Grade 9 English text books for every students, proper library, lack of speaking english, readings of reading books and well stock library with english fictions must improved from.

Figure 5: School A Student 3 – remarks on textbooks and well-stocked library
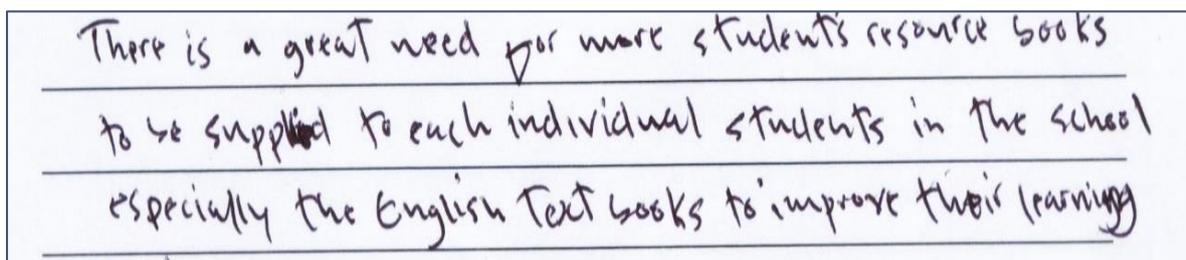
> There is a great need for more students resource books to be supplied to each individual students in the school especially the English Text books to improve their learning

Figure 6: School B Student 3 – remarks on students' resource books
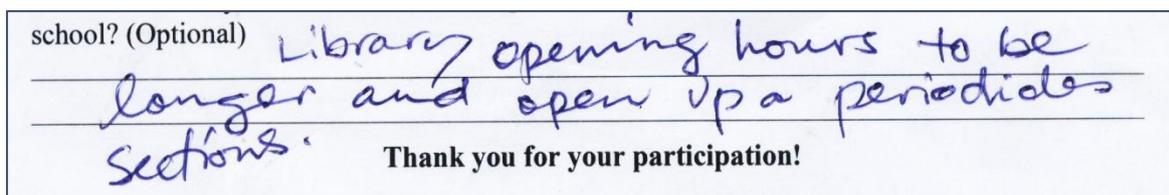
> school? (Optional) Library opening hours to be longer and open up a periodicals sections. Thank you for your participation!

Figure 7: School B Teacher 1 – remarks on Library opening hours

These data suggest that these two secondary schools are in a great need of English textbooks and well stocked library. The data shows that while sharing textbooks, students are being deprived of their right to access these resources and after all they could not master their English language skills. This is supported by the researcher's remarks on the availability of resources.

> *Researcher: During the two lesson observations, I had a checklist with me and while the lessons were underway, I looked around to see if English resources were available. I saw 22 English textbooks in one school and 20 English textbooks in the other school. There were about 5 reading activity textbooks and 5 writing activity textbooks available in each school. Some of the books in the library are very old ones.*

Conclusion and recommendations

In Papua New Guinea, students learn English as a second language when they first enroll in formal school. Therefore, students who advance to grade 9 are expected to have mastered listening, speaking, reading and writing skills in English. Unfortunately, this is not evident. A lot needs to be done about the development of grade 9 students acquiring listening, speaking, reading and writing skills in English.

This discussion has highlighted dominant teaching strategies that are used to develop listening, speaking, reading and writing skills of grade 9 students who do not have English as their first language. Literature sources suggest that in order for someone to acquire the four language skills in a second language (Harmer, 2007) direct teaching must take place (Bunce, 2016). Hence, English teachers' commitment and the availability of resource materials were also highlighted in the discussion.

There are three recommendations that this discussion wishes to bring forth that were found to have been challenges that have had detrimental effects on grade 9 students' mastery of the four language skills in English. Firstly, the findings revealed that there is a great need for English teachers to rise to new heights in their lesson preparation, lesson delivery, attendance and punctuality. Teachers are role models and so they need to be vary of what they impart to students because as learners, students can pick up traits that their teachers portray each day.

Secondly, apart from having committed English teachers, resources like English textbooks, a well-stocked and operational library need to be available at the students' disposal. Participants of the study have spoken through the results and hence would very much expect necessary amendments to the teaching and learning strategies currently used to teach listening, speaking, reading and writing in English.

Finally, this discussion only presented a snapshot of the issue at hand and more research needs to be conducted on which teaching strategies and learning styles operate most effectively in different settings and for different language learning purposes.

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Causes of cheating in exams and implications for grade 12 national examinations

Peter Kaiyeke

Abstract

This paper discusses the potential impact of cheating during grade 12 national examinations in Papua New Guinea (PNG) based on an international review of the literature on why students cheat in examinations in education institutions around the world. The literature reviewed shows that one of the major causes of cheating in examinations is the fear of failure. This is because parents place high expectations on students to do well in their examinations, and therefore when students feel that they are not well prepared for the examinations, they choose to cheat in order to score well. Other causes include: inadequate preparation for examinations; lack of facilities to support leaning of subject content; and unqualified teachers who do not teach subject content well. The research also explored how the students' mastery of skills in the subject areas is assessed and the learning support strategies for Grade 12 students in PNG. The study found that due to large numbers of students per class, a lack of facilities, and guidance and counseling not being done, then potentially many students are not prepared well for the Grade 12 national examinations. In such cases students may make the decision to cheat in examinations to gain good marks to qualify for entry to tertiary institutions and formal employment. This paper recommends that more field research is needed to the extent of a cheating culture in school examinations in PNG so that appropriate strategies may be developed to minimize Grade 12 examination cheating in the future.

Introduction

Cheating in examinations is a contentious issue in the Papua New Guinea (PNG) education system and a concern of stakeholders. According to Hosny and Fatima (2014), cheating in examinations is defined as academic dishonesty. Cheating in examinations is also considered as an academic crime (Dodeen, 2012; Kerkvliet & Sigmund, 1999). Many researchers affirm that cheating comes in various degrees such as students accessing information through copying or using electronic devices for answers (Cook & Ezenne, 2010; Finn & Frone, 2004; Gu, 2011). These practices in PNG were first exposed in 2012 and some secondary schools were implicated in the grade 12 national examinations for cheating. Consequently, since then not many students from these schools have been able to secure spaces at tertiary institutions. Therefore, this study hoped to establish why students cheat in examinations and identify possible strategies that would reduce such practices.

Related literature

Students at all levels of education may cheat for various reasons (Lazarus, Mokula, & Lovemore, 2014; Murdock, Beauchamp, Beauchamp, & Hinton, 2008). In some areas of PNG, cheating was uncovered and students were penalized for such practices but those who were undetected eluded being penalized. Many authors and research reports have recorded various kinds of cheating. Cheating in examinations or other academic assessable tasks is a widespread issue and it takes place at all levels of education throughout the world. Cheating is an issue because it violates academic rules and degrades institutional integrity, ethics and moral values (Finn & Frone, 2004; Ogunji, 2011). Following are presented a few cases from national and international literature on cheating in examinations; how this impacts on schools that are implicated and their future students; how this issue may be minimized; and strategies to detect cheating.

Factors that prompt grade 12 students to cheat in the national examination

According to Gu (2011), cheating in examinations and other academic assessment tasks are part of Chinese culture and is common at all school levels. Most of the cheating was done using the internet, programmable calculator, camera, cell phones or computer scanners. This study revealed that most of the Chinese students cheat to get better grades because of their fear of failure. Others cheat as a result of fear of peer pressure. Some cheated to get better grades that would assist them to be eligible for future job markets. While Gu's study was a novel perception study, it was not specific as to what grade level cheating occurred in examinations. This study found that cultural change and technologies can influence students' decision to cheat in exam.

Cheating in examinations is also a growing issue in PNG. The National newspaper reported that some Grade 12 students had accessed exam papers before exams dates (Ako, 2013 ; Haip, 2013; Per, 2013). The National further stated that students bought each examination paper for K500, while others accessed answers through cell phones via friends and relatives at other schools. It is suggested that some education leaders gained access to the exam papers and sold them. The general view of concerned stakeholders is that students in PNG cheat because of poor teaching, unqualified teachers, poor administration, lack of teaching and learning resources and competition for spaces in tertiary institutions. However, no empirical studies have been done in PNG to gain an exact understanding of why students cheat and how problems may occur when exam papers are distributed before the examination dates. It is possible that cheating may occur but, as yet, has not been detected or exposed.

Students' mastery of skills in the subject area assessed

Yusuf, Yinusa, and Bamgbose (2015) conducted a study on the perception of undergraduates on factors responsible for examination malpractices in Nigeria. They used a descriptive case study with a sample of two hundred (200) undergraduate participants. The study also explored students' mastery of skills in the subject areas assessed. In regard to examination malpractices in Nigeria, the research revealed that 38% of students agreed that it was caused by poor assimilation of concepts being taught; 28% of students reported that they had inadequate teaching hours with lecturers; 22.5% of students had expressed that schools lacked proper guidance on what to teach; while 29.5% of students had reported that there was lack of effective student learning supervision. This study was done in a tertiary institution which, if a similar research was conducted in a secondary school, the perception rates may differ. Thus, a specific and targeted group is necessary to engage in the study to obtain data on a secondary school situation.

Through observations of Romanyshyn and Romanyshyn (2010), they reported that the PNG education system was on the verge of collapsing. The report highlighted issues as inadequate funding from the government, inadequate teaching and learning resources, poor English skills, syllabuses falling short of international standards, assessment being poorly done, and that final examination and syllabuses sometimes do not align in theory and practice. Moreover, there was a lack of teachers' expertise in content of the subjects they taught. This implies that future success of the students looks uncertain which may contribute to low mastery of skills and therefore students may take the option of cheating in examinations. This report was based on individual perceptions and observation. While this is useful information, in-depth research is needed to establish why students cheat in examinations in order to document such practices that affect the integrity of examinations in PNG.

Grade 12 students' learning support strategies

Anderson-Butcher (2004) noted that students service center in US schools provides guidance and counseling for students who wish to advance. Some schools believe that conducting remedial lessons helps students to become successful in their exams (Bettinger, Boatman & Long, 2013). In a novel perception studies, Miller (2004) found that a media library assisted students to achieve dual goals: to be better prepared for examinations as well to produce independent lifelong learners. A media library was identified as a resourceful environment where students could access any information to support

learning. However, the range and quality of learning support strategies for students differ depending on the status and location of a country. Thus, PNG as a developing nation may lack the expertise and financial resources for student learning support initiatives that are available in developed nations. Hence, field research is needed to explore this aspect further.

Methodology

This study adopted aggregate-level data. Aggregate level-data includes tables and statistics derived from quantitative micro-level data. The emphasis was focused on evaluation, comparison and data analysis processes. This was a desktop or secondary study, which was conducted at Divine Word University (DWU) using primary research data from related topics of study to review and critique. It is generally known that students cheat in examinations all over the world. It is also known that both male and female students cheat in examinations and that they cheat for various reasons. PNG is currently dealing with cheating by grade twelve students in particular schools. Cheating in this particular examination was first detected in 2012. This prompted this researcher to explore the issue further. Therefore, various research reports on cheating were explored to gain an insight into why students cheat in examinations. A sample of four data sources was analyzed, evaluated and critiqued under three research questions. These data were valid, tested and internationally recognized for public access.

Research questions

The overarching question that guided this study is: What is the students' competency level in their subject areas by the end of grade 12? To expand on this question further, the following three questions were addressed during the literature search:
1. What factors prompt grade 12 students to cheat in national examinations?
2. How is students' mastery of skills in the subject areas assessed or established in grade 12?
3. What strategies to support learning are available in the school for grade 12 students when they wish to advance further?

Results from data analysis

Various research reports on cheating in examinations were explored. Four sets of data from the reports were extracted and discussed.

1.   Major factors prompt grade 12 students to cheat in national examinations

Table 1 presents information on why students cheat in examinations in secondary schools. That information was collected from a study conducted in Masaba South District Kissi of Kenya in 2014. The second table presents the factors that caused examination malpractice among secondary school students in 2014, Orumba State, Kenya. That study did not specify what grade-levels cheat in examination. However, the data in both tables indicate various factors that trigger cheating in examinations with percentages, frequencies and mean of scores.

Keys

Where, X = Arithmetic mean
 ∑ = Sigma or summation
 F = Frequencies
X = Scores apportioned to each of the response type
Strongly Agreed (SA) = 4
 Agree (A) = 3
Disagreed (D) = 2
Strongly Disagreed (SD) = 1 Thus, 4 + 3 + 2 + 1 4 = 10 4 = 2.5

Table 1: Factors contributing to cheating in examinations

Variables	Form two				Form three				Total	
	Males		Females		Males		Females			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Inadequate preparation	30	6.68	40	8.91	34	7.57	41	27.39	145	32.29
Performance pressure	25	5.57	20	4.46	25	5.57	25	5.57	95	21.16
Stiff competition	14	3.12	10	2.23	20	4.46	18	2.03	62	13.81
Poor invigilation	10	2.23	10	2.23	12	2.67	11	2.45	43	9.58
Lack of facilities	10	2.23	9	2.00	10	2.23	10	2.23	39	8.69
Anxiety	5	1.11	10	2.23	7	1.56	12	1.56	34	7.57
No response	7	1.56	8	1.78	9	2.00	7	2.00	31	6.90
Total	101	23.17	107	24.29	117	27.39	124	27.39	449	100

Source: (Nyamwange, Ondima, & Onderi, 2013, p. 13521)
Note: Total percentage was rounded off to the nearest whole number.

Evaluating dataset: Table 1

The study on factors influencing examination cheating among secondary school students was investigated in one of the Kenya districts in 2013. That study was purposely done to discover the reasons why students cheat in secondary school examinations. The research was conducted to find out whether competition, poor preparation, poor invigilation, inadequate facilities, ineffective teaching and anxiety had any influence on student cheating in secondary school examinations. They used the explanatory approach of descriptive survey research design for this study. A total of four hundred and forty-nine students and 6 head teachers were selected as sample size from six selected schools. Questionnaires were used for data collection and all items in the questionnaires were tested for content validity and reliability. The statistical package for Social Sciences (SPSS) was used to analyse data. The findings from that study showed that the major factors that influenced examination cheating were; poor preparations for examinations (32.29%), performance pressure from parents and teachers (21.16%), stiff competition among students (13.81%), inadequate invigilation of the examinations 9.58%, lack of facilities to support student leaning (8.69%) and examination anxiety (7.57%). Approximately 7% of the participants did not respond to this particular question. This data shows that students are more likely to cheat if they have not prepared well for their examinations, but need to score well to please their parents.

Table 2: Factors that bring about examination malpractice among secondary school students

S/N	Research Items	SA	A	D	SD	EF	∑Fx	X	Decision
1	Academic laziness of students causes examination malpractices.	60	70	15	5	150	485	3.2	Accepted
2	Lack of qualified and dedicated teachers bring about examination malpractices.	50	90	5	5	150	485	3.2	Accepted
3	The quest and rush for a good result / certificate.	60	70	10	10	150	480	3.2	Accepted
4	Congested sitting arrangement during examination.	55	60	5	30	150	440	2.9	Accepted
5	Fear of examination failure	90	50	2	8	150	522	3.55	Accepted

Source: (Oko, 2014, p. 24)

Evaluating dataset: Table 2
Data in table 2 is extracted from another study. This study explored the 'causes and effect of examination malpractice on the performance of secondary school students in Orumba South Local Government Area. The study was conducted by Department of Educational Administration and Planning of the National Open University of Nigeria in 2014. They used descriptive survey design for three (3) research questions. A sample size of 150 students was selected for that study. The responses were analyzed using arithmetic mean (X). The study revealed that fear of failure (X=3.55), academic laziness (X=3.2) and lack of qualified and dedicate teachers (X=3.2). It was further reported that the quest and rush for a good result or certificate (X=3.2) and congested sitting arrangement during examination caused cheating in examination (X=2.9). The results from the table 2 show that majority of the students are likely to cheat in examination if they are fear of failing exam and would not obtain better grades for tertiary entrance. Others may cheat if they are academically lazy and not committed to study. Some students may likely to cheat in schools that lack of qualified teachers and dedicate teachers in each content subject. Several literatures have indicated that many teachers in PNG are incompetent in both teaching skills and subject content. Those schools with this group of teachers may be likely to have high chances of students cheating.

2. Students' mastery of skills in the subject areas assessed

Several studies have identified students' mastery of learning skills in subject areas as beneficial to combat cheating in exam. The data from table 3 below show that the adoption of continuous assessment would minimize cheating in examination. That study surveyed Nigerian schools in 2015.

Table 3: Response of student-teacher reaction to the adoption of continuous assessment as an alternative to minimize cheating in examination

Factors	Agreed	Disagreed	Undecided
1. Preference for Continuous Assessment	82.7	11.6	5.7
2. That Continuous Assessment forces student to read	100	0	0
3. That student do cheat as much as in C.A tests as in examination	53.8	30.8	15.4
4. C.A causes laziness among students	13.5	80.8	5.7
5. Some students induce teachers by offering gratification to enhance C.A grades	42.3	30.8	26.9
6. C.A test are not supervised thoroughly	53.8	40.4	3.8
7. it is easier to bring already prepared answers or jottings into examination halls than C.A test room	55.8	44.2	0
8. Parents inability to buy test books encourage cheating in examinations	53.8	28.9	17.3
9. J.S.S certificates should be awarded only on the basis of C.A grades to discourage malpractices.	42.3	42.3	15.4
10. S.S certificates should be awarded only on the basis of C.A grades to discourage malpractices	50.0	42.3	7.7
11. C.A grades should carry more marks (weight) than examination grades.	78.8	13.5	7.7

Source: (Olubukola & Bankole, 2015, pp. 783-789)
Mean score = 42.0 and Standard Deviation= 7.98 N= 100.

Evaluating dataset: Table 3
This study explored continuous assessment techniques as one of the strategies to reduce malpractice in Nigerian schools. The population study was teachers. A total of 200 participants were selected from males and females of equal numbers. The study was a descriptive survey design and stratified random samplings were used to select samplings. The researchers used frequency counts, percentage, mean, standard deviation and t-test to describe and analysis data. The hypothesis was tested using t-test for validity and reliability purposes. The study revealed that: about 82.7% of student-teachers prefer

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continuous assessment; all responses agreed that continuous assessment forces students to read (100%); students do cheat as much as in continuous tests and examination (53.8%); continuous assessment causes laziness among students (13.5%); and some students induce teachers by offering gratification to enhance continuous assessment grades (42.3%). In addition, continuous assessment tests are not supervised thoroughly (53.8%); it is easier to bring already prepared answers or jottings into examination halls than a continuous test room (55.8%); parents inability to buy test books encourages cheating in examinations (53.8%); J.S.S certificates should be awarded only on the basis of continuous grades to discourage malpractices (42.3%); S.S certificates should be awarded only on the basis of continuous grades to discourage malpractices (50.0%); and continuous grades should carry more marks (weight) than examination grades (78.8%). The study showed continuous assessment as a strategy to offset cheating in examinations.

The data from this study revealed that many participants prefer continuous assessment because it forces students to read and study well throughout a semester. Several literature sources revealed that continuous assessment (tests, assignments, projects, exams and quizzes) increases student intellectual level when they spend quality time reading, studying and doing research. This study implies that cheating in examinations would be minimized if continuous assessment was practiced effectively in schools. The Department of Education in PNG also emphasizes that continuous assessment is an important tool to student success. Unfortunately, some teachers in PNG do not practice continuous assessment because of the large number of students in a class. Large batches of test, assignment and exam papers for marking seem to be a huge burden for teachers to be implementing continuous assessment effectively.

3. Strategies of learning support for Grade 12 students

Some secondary schools in PNG were implicated for cheating in national examinations. The PNG Department of Education is yet to release the report on the examination scandal. Several research studies have been conducted outside of PNG and they propose some strategies that would support students' learning at school. Some of these studies were done in African learning institutions. Table 4 shows lecturers and students' responses for solutions to the problem of examination malpractices. This study was done in Nigeria between 2010 and 2011.

Table 4: Lecturers and students' responses on solutions to the problem of examination malpractices

Statement	SA	AG	DA	SD	x	s	Remark
Provision of adequate teaching resources	161	80	70	89	2.78	1.19	Accept
Inculcation of moral values and instructions	262	107	15	16	3.54	0.75	Accept
Reduction of emphasis on paper qualification	221	139	16	24	3.39	0.82	Accept
Guidance and counseling services	235	129	13	23	3.44	0.81	Accept
Implementation of the relevant decrees	180	100	46	74	2.97	0.14	Accept

Source: Oche (2012, p. 753)

Keys

Where, X = Arithmetic mean
∑ = Sigma or summation
F = Frequencies
X = Scores apportioned to each of the response type
Strongly Agreed (SA) = 4
Agree (A) = 3
Disagreed (D) = 2
Strongly Disagreed (SD) = 1 Thus, 4 + 3 + 2 + 1 4 = 10 4 = 2.5

Evaluating dataset: Table 4

The study on assessing the impact of examination malpractices on the measurement of ability in Nigeria was initiated by the Department of Educational Foundations and General Studies of the College of Agricultural and Science Education, Federal University of Agriculture, Makurdi Benue State, Nigeria, West Africa. The study was conducted by Emaikwu Oche in 2010 and 2011 purposely to assess the impacts of examination malpractice. The study was a survey where questionnaires were used to collect data. A sample of 300 students and 100 lecturers were randomly selected for the study. The data were analyzed using descriptive statistics of mean, standard deviation and percentage. The study found that sufficient teaching resources (2.73), moral and core values (3.54), minimizing emphasis on paper qualification (3.39), guidance and counseling services (3.44), and exercising other relevant decrees (2.97), would minimize and provide solutions to examination malpractice.

The data shows that the moral and core values, and guidance and counselling services, which many participants preferred, would minimize cheating in examinations. The practices and facilities in these areas are common in many developed nations and some developing nations. However some schools in PNG do not have libraries or guidance and counseling services to support students' learning. This implies that many students in secondary schools are not properly guided and counseled when they need extra academic and social assistance. Moreover, some secondary schools could do more to stress ethics, moral and core values. This study also indicates that the lack of such academic support may expose students to consider using unethical practices.

Discussion of findings

1. Factors that prompt grade 12 students to cheat in the national examinations

The results from table 1 and table 2 have shown that cheating in academic institutions exists and there are many factors associated with such malpractice. Four major factors relevant to the PNG teaching and learning context were described as laziness, fear of failure, inadequate preparation, and lack of facilities and qualified teachers.

Laziness: Many students tend to become academically lazy. This group of students rarely spends quality time reading and studying their school work. Their study time is spent on other things and when exam dates approach they are easily tempted to cheat. A similar finding from Nicholas (2014) revealed that many students cheat because of laziness or procrastination. It claimed that many grade 12 students in PNG are like to cheat if they do not study well and adopt a culture of procrastination.

Fear of failure: The results from the table have indicated that some students cheat because of fear of failure. This finding is consistent and related to Gu's (2011) finding which revealed that most of the Chinese students cheat to get better grades because they fear failure. In relation to this malpractice, many grade 12 students in PNG are well informed that there are limited spaces in tertiary institutions and thus, students with better or higher grades would be accepted. Students with low grades would not be offered places in tertiary programs. This group of disadvantaged students might be likely to cheat to gain better grades as a measure for tertiary selection. They fear failure.

Inadequate preparation: The data from table 1 has shown that if students are not prepared well in terms of content and skills in every examinable subject, they are more likely to cheat if they have not prepared well for their examinations, but need to score well to please their parents and teachers. This particular group of students is more likely to buy examination papers before the examination in the hope of performing well in an examination.

Lack of facilities and unqualified teachers: Lack of facilities and qualified teachers are parallel factors which impact on students' academic performance. The results from table 1 and table 2 have shown that any school that lacks teaching and learning facilities, and has unqualified teachers, may influence students to buy and bring examination answer sheets into examination rooms. An observation study (Romanyshyn & Romanyshyn, 2010) affirmed that many secondary schools in

PNG lack an adequate supply of teaching and learning resources, students have poor English skills, syllabuses fall short of international standards, assessments are not properly done, and final examinations and syllabuses sometimes do not align. Moreover, there may be a lack of teachers' expertise in content of the subjects they teach. In order for the students to have optimal opportunities to do well in examinations, every school in PNG must have sufficient teaching and learning resources and qualified teachers. The schools that lack these resources may lead to students being involved in cheating.

2. Students' mastery of skills in the subject areas assessed

Several studies have identified levels of mastery skills that could improve learning skills to combat cheating in examinations. The data from table 3 show that the adoption of continuous assessment is one strategy to minimize cheating in examinations. The findings from table 3 reveal that continuous assessment force students to study on a regular basis and might reduce cheating practices.

Continuous assessment force students to read: The data from this study revealed that many student-teachers preferred continuous assessment because it forced students to read and study well before test and examination dates. Romanyshyn and Romanyshyn (2010) also claimed that continuous assessment (tests, assignments, projects, exams and quizzes) increases student intellectual level when they spend quality time reading, studying and doing research. This study implies that cheating in examinations would be minimized if continuous assessment is effectively practiced in schools. Even though the PNG Department of Education emphasizes that continuous assessment as an important tool to increase student success, some teachers in PNG do not practice continuous assessment effectively. This is because of the large number of students in classes and the burden of marking sets of assessment tasks continuously.

3. Strategies of learning support for Grade 12 students

The results from the table 4 show lecturers and students' responses on the solution to the problems on examination malpractices. The major results include inculcating moral and core values, and guidance and counseling services.

Guidance and counseling: The results in table 4 shows that guidance and counseling may provide reasonable solutions to cheating and also support students learning if they need more assistance from teachers to succeed. This is supported by Anderson-Butcher (2004), who stated that student service centers in US schools provide guidance and counseling, for students who wish to advance. Many developed nations see guidance and counseling center as important avenues for supporting student learning. However, Romanyshyn and Romanyshyn (2010) revealed that many schools in PNG do not have libraries, guidance and counseling centers to support student learning. This implies that many secondary schools' students in PNG are not properly guided and counseled when they need extra assistance to address academic and social concerns.

Moral and core values: The results also show that moral and core values are the essence of ethical conduct. Students' acquisition of moral values comes from home and religious sources as well as individuals having an intrinsic understanding of right and wrong. The study revealed that if moral and core values are taught at school, many students would be further influenced to behave positively, not to cheat in examinations and to uphold academic integrity. There is clear evidence that Christian ethics are integrated in the Personal Development (PD) syllabus of the PNG curriculum. However, despite all instructions about right and wrong, students may be tempted to cheat in examinations in order to avoid poor results.

Conclusion

In conclusion, this study has successfully answered the underpinning questions. Students' perception of their competence in examinable subjects influences the temptation to cheat in examinations in the

hope of their going undetected. A strong motivation to do well in grade 12 examinations is to satisfy parental expectations and to increase chances of being offered a place in a tertiary education institution. Factors influencing students to cheat in national examinations were laziness, fear of failure, inadequate preparation, and lack of appropriate facilities and qualified teachers. Continuous assessment was identified as one of the strategies that would support student learning and offset the impact of cheating in final examinations. Strategies to support student learning were identified as guidance and counseling services and ongoing instruction of moral and core values. This study is significant as it provides a basis for further research into concerns about examination cheating and how it could be addressed in the PNG educational context.

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Challenges in learning English reading skills in upper primary classes

Stephanie Bolnga

Abstract

This study sought to explore why learning English reading skills is a challenge for grade 8 students in upper primary schools, through an exploration of views and practice in one school. Reading skills are vital in enhancing growth and progress in children's learning. In Papua New Guinea, the education system places a lot of emphasis on literacy, which focuses on creating students who can master reading and writing in the English language. Furthermore, in formal education, reading and reading comprehension are necessary for students to grasp the knowledge required in different subjects to advance from elementary through to tertiary levels. Therefore, the study was specifically carried out to discover the resources used and staff development needed to support grade 8 students' learning in reading and reading comprehension skills. Data was gathered through questionnaires, interviews and classroom observations. Since the aim of the study was to find out why it is a challenge for grade 8 students to learn and develop ERS in the upper primary school context, Vygotsky's Social Development Theory (1978) and Piaget's Theory of Intellectual Development (1952) guided the research. The study found that inadequate resources, insufficient time for reading lessons, and lack of staff development to support the learning of ERS were the main challenges faced by grade 8 students and their teachers at the research site. These challenges made it difficult for upper primary school students in learning to master ERS.

Key words: English reading skills, reading proficiency, teacher self-efficacy.

Introduction

It is challenging for Papua New Guinea (PNG) primary school students to learn English reading skills (ERS) because many of them do not speak English as a first language. In many primary schools, reading resources to support students to master ERS is nil or minimal. Additionally, teachers are not trained well to teach ERS to students who do not speak English as a first language. In PNG, learning ERS is important for grade 8 students in the upper primary schools because they need to master this skill in order to read their various subjects' content which are written in English. ERS will also enable students to proficiently read the instructions and questions in the national grade 8 examinations which are in English. The significance of the study is to inform school leaders to improve teaching practice of ERS. This paper presents what came out strongly in a research that was conducted to find out why learning ERS still remains a challenge for many grade 8 students in PNG. Although there were other findings in the study, the most significant findings were related to the availability of reading resources and staff development in teaching ERS, which will be the focus of this discussion.

Literature review

In PNG, the teaching and learning of English reading and reading comprehension skills is still a challenge for students in upper primary schools. It is a challenge because many students learn English as a second language while at school. Therefore, to inform this study, both national and international research literature was used to show the difficulties faced by both grade 8 teachers and their students in gaining reading proficiency or mastery of ERS.

The use of reading resources is vital for supporting students in their learning of ERS at all levels of education. Both Vygotsky (1978) and Piaget (1952) present in their theories that learning takes place in the school environment when the learner socially interacts and engages with the teaching and learning resources available there. A research conducted by Malone and Paraide (2011) on mother

tongue-based bilingual education in PNG, found that elementary school teachers lacked effective methods, materials and training to teach oral skills in the English language to effectively implement the bridging process from elementary school to lower primary school. This problem resulted in students lack of confidence in English literacy skills in the higher primary school grades. In a similar study in PNG, Chee (2012) found that the impact of inadequate and insufficient English resources on grade 8 students was that they lacked the basic English language skills needed to continue to grade 9. In the Unites States of America, a context similar to PNG where English is learnt as a second language, a research by Rumberger, Maxwell-Jolly and Callahan (2003) found that in Carlifornia schools, the unavailability of instructional materials at students' reading levels in English resulted in poor academic performance of grade 7 to 12 students. The study also found that inadequate instructional time for students to engage in learning English language skills resulted in low academic achievement. Hence, research shows that without proper support, in terms of resources, training and time allocation for reading lessons, teachers cannot assist students to master ERS.

The various strategies in teaching ERS emphasized in the PNG upper primary language syllabus (National Department of Education, 2003) are not effectively used by teachers because they do not know how to teach ERS. In support, Zeegers (2005), in her research on primary school teacher education in PNG, found that teachers were not properly trained to teach English as a second language so they could not effectively use the language syllabus. Similar to the PNG context, a study in Turkey on pre-service teachers' perceptions about critical reading self-efficacy by Karabay, Kayıran and Işık (2015) found that the ability of the teacher to effectively teach ERS involves self- efficacy, which means having the knowledge and power to effectively teach students to master reading skills and become proficient readers. According to Woolley (2010), in a research done in Australia on developing reading comprehension, the teacher should use many strategies repeatedly so that students can be familiar with it and apply it during individual reading. This is supported by the scaffolding/reciprocal teaching strategy (Vygotsky, 1978), assimilation and accommodation (Piaget, 1952). Thus, school-based in-service is a positive step towards assisting teachers to effectively support ERS development in grade 8 students.

Methodology

The mixed methods approach (Hussein, 2009) was used in the research to find out why learning ERS is a challenge for grade 8 students. The purpose of the study was exploratory in nature and involved research in a set of individual case studies by using grade 8 student's questionnaires and grade 8 teacher's questionnaires. In addition, interview data was collected from students and observation data was also gathered on teacher-student activities both inside and outside the classroom. The research employed the non-probability purposive sampling as a method of data collection because the research site was accessible and the participants were available for the research. Although the sample size was small, with 81 participants from one urban upper primary school, purposive sampling allows generalizations to be made, to a small extent, to other schools with similar settings.

Discussion of findings

1. Resources to support the learning of ERS

Information was gathered from the participants on the availability of resources to support students learning of ERS. Resources investigated in the study were text books, reading books, dictionaries and thesaurus, and time allocated for reading and reading comprehension activities. The following sections discuss the findings.

1.1. Text books

Data were collected on how often language text books were made available to grade 8 students during lessons. The data shows that text books were sometimes made available to students. The students revealed that in a grade 8 class of 43 to 44 students, 1 text book was shared by 2 to 3 students. The

students were of the view that although they shared text books, whenever the books were made available to them, this arrangement was not working well for them. Both teachers and students were asked through the questionnaires to find out whether text books, especially the Grade 8 Language Student Book by Susan Baing, were always made available for students to use during lessons. The following table shows their responses.

Table 1: Availability of student text books

Frequency	Always	Sometimes	Rarely	Never	Total Participants
Teachers' responses	1	2	1	0	4
Students' responses	27	48	2	0	77

From this data, both teachers and students agreed that text books were sometimes made available for grade 8 students to use during lessons. This is supported by the qualitative data which shows that text books were sometimes made available to students due to the shortage of text books, therefore, when one grade 8 class was using the limited number of text books, the other three classes missed out.

In the interviews, one student said:
According to me, I am happy that we have text books and the teachers are also very good. One thing I do not like is that there is a lot of noise both inside and outside the classroom which always disturbs me.

Another student said:
We do not have enough text books in class, therefore, we end up sharing 1 book between 3 to 4 students.

This interview data is supported by the following classroom observation data.
First, I noticed a pile of 21 Grade 8 Language Student Books placed on the floor in front of one grade 8 classroom. I then proceeded to another grade 8 classroom to observe a Personal Development lesson because none of the language teachers consented for me to observe their lessons. The reason for this arrangement was that English reading skills are used by all subjects. I noted in that classroom that the students were neatly seated in two rows on either side of the room facing the blackboard in front. One row had 4 students each in 6 table groups while the other row had 4 students in 5 table groups. Out of the 43 students indicated on the class list, only 39 were present. I noticed that this seating plan would make it easier for the sharing of text books. In this particular 40-minute lesson that I observed, textbooks were not used. However, the teacher summarized notes on A3 paper and pasted them on the blackboard for students to copy. This strategy saved time for class discussions which were conducted in English.

This information shows that School Z needs to have enough Grade 8 Language Student text books to support all grade 8 students in learning ERS.

1.2. Reading books

Data were gathered on how often reading books were made available to students. The data reveals that School Z has never made reading books available for students to read. Data also shows that teachers encourage students to look for their own books to read and also to share with their friends because the reading books which were given to students to read at the beginning of the year had never been returned. While some students were making an attempt to read books, other students who did not have access to good reading books missed out on reading. Both teachers and students were asked through the questionnaires to find out whether reading books were always made available to students. The following table shows their responses.

Table 2: Availability of reading books

Frequency	Always	Sometimes	Rarely	Never	Total Participants
Teachers' responses	0	0	2	2	4
Students' responses	24	33	14	6	77

From this data, the teachers' and students' responses do not match. However, most of the grade 8 students responded that reading books were sometimes made available during reading lessons. This group of students' responses was supported by the qualitative data which indicated that most grade 8 students followed their teachers' instructions by bringing their own reading books to school to read, to share with others and also to borrow from others.

In the Your View section of the Teacher Questionnaire one teacher stated:
One thing that is not working well for me in developing English reading skills in grade 8 students is that not enough reading books are available for students to read.

In the interviews, one student said:
The school does not have many reading books so we have to look for our own books, either by buying them at the secondhand shops or by borrowing from friends, to read. If the school has a library, then it will be very good.

Another student said:
First, the students misused the reading books so now the school does not have enough books. I also read my own books.

One more student said:
I also look for and buy my own books to read. One problem at school is that there are no reading books for us to borrow and read. We really need a library. Currently a Grade 5 class is using the incomplete library building because their classroom got burnt down.

This interview data is further supported by observation data from field notes.
I found out from the teachers that grade 8 students had misplaced the reading books that were given to them at the beginning of the year. One teacher said that he encouraged students to read their own books in order to improve their ERS. I also found out that the school had no library. I discovered that a grade 5 class, whose classroom got burnt down due to an electric fault, was using the incomplete library building which had been recently built.

This information shows that School Z needs reading books to promote the learning of ERS in grade 8 students. The school also needs a school library to support the teaching and learning of ERS.

1.3. Dictionaries and thesaurus

Data were collected on how often dictionaries and thesaurus were made available for grade 8 students to use during lessons. The data reveals that School Z has never made dictionaries and thesaurus available for students to use. However, the teachers encouraged students to buy and use their own dictionaries and thesaurus. Both teachers and students were asked through the questionnaires to find out whether dictionaries and thesaurus are always made available in class. The following table shows their responses.

Table 3: Availability of dictionaries and thesaurus

Frequency	Always	Sometimes	Rarely	Never	Total Participants
Teachers' responses	0	0	1	3	4
Students' responses	39	19	18	1	77

From this data, the teachers' and students' responses do not match. However, most of the grade 8 students responded that dictionaries and thesaurus were always made available during reading lessons. This can be explained using qualitative data which show that most grade 8 students always or sometimes brought their own dictionaries and thesaurus to school and made it available for use during lessons.

From the interviews, one student said:
> *The school does not provide dictionary and thesaurus so we have to buy our own.*

Another student said:
> *I also have my own dictionary and thesaurus because the school does not provide any.*

In the Your View section of Teacher Questionnaire, one teacher stated:
> *One thing working well for me in developing reading skills in grade 8 students is that students are identifying new words, defining them and correctly pronouncing these words.*

This information is supported by lesson observation data and field notes.
> *I observed that all teachers and some students used their own dictionaries and thesaurus. I discovered from students that those who did not have these resources either shared with or borrowed from their friends. In the Personal Development lesson that I observed, the teacher put up a vocabulary list on A3 paper. The list had 9 words with their meanings which was a helpful strategy which was inclusive of all students in the class.*

This information shows that it is important for School Z to support the grade 8 students in learning ERS by providing them with dictionaries and thesaurus.

1.4.   Time allocation

Data were collected to find out whether enough time was given to grade 8 students for reading and reading comprehension activities. The data reveals that School Z has not allotted time for reading lessons alone. The data also shows that the time that students are given to read is insufficient. Furthermore, data shows that students were often distracted and disturbed from reading by the noise from fellow students. Both teachers and students were asked through the questionnaires to find out whether enough time was given to reading and reading comprehension activities. The following table shows their responses.

Table 4: Sufficient time given for reading activities

Frequency	Always	Sometimes	Rarely	Never	Total Participants
Teachers' Responses	0	2	2	0	4
Students' Responses	12	41	21	3	77

From this data, two teachers and most students agreed that reading and reading activities were sometimes given sufficient time. However, the two other teachers and some students revealed that this was rarely the case. This is supported by information from other sources which suggest that for both teachers and students, the time allocated for reading was insufficient for meaningful and in-depth reading and understanding.

In the Your View section of the Teacher Questionnaire, one teacher stated:
> *One thing that is not working well for me in developing reading skills in grade 8 students is that 40-minute lessons is insufficient for reading lessons.*

Another teacher stated:
> *The school needs to timetable reading lessons.*

In the Your View section of the Student Questionnaire, one student stated in support:

> *One thing that is not working well for me in developing my English reading skills is that not enough time is given for reading lessons.*

From the interviews, one student said:

> *One thing I do not like is that there is a lot of noise both inside and outside the classroom which always disturbs me. I think when the school completes the library building, it will solve this problem because I will have a place to go and sit down and read.*

This information is supported by observation data from field notes.

> *I observed during the free period on Wednesday when students were supposed to be reading in the classrooms, there was a constant movement of students in and out of the classrooms. I saw seven girls sitting outside one grade 8 classroom, who were trying to read amidst the noise and distractions.*

This information suggests that for grade 8 students to learn ERS effectively, sufficient time allocation with a quiet and conducive environment is needed.

2.   Staff development to support teaching of ERS

Data was collected on how staff development in teaching ERS was supported by the school. The study revealed that at School Z staff development in teaching reading skills was rarely promoted by the school. It was found that the teachers needed a school library that would provide resources to support teaching and learning. It also discovered that reading lessons and termly staff in-service needed to be properly timetabled to promote the teaching and learning of ERS. Furthermore, the teachers expressed interest to undertake further studies to enhance their knowledge and to advance their qualifications. Teachers were asked through the questionnaire to find out how staff development in teaching ERS was supported by School Z. The following table shows their responses.

Table 5: Grade 8 teachers' responses to the frequency of staff development in teaching ERS

Frequency	Always	Sometimes	Rarely	Never	No response	Total Participants
Teachers' responses	0	0	2	1	1	4

This information strongly suggests that staff development in teaching English reading skills was rarely facilitated by School Z. This is further supported by the information gathered from the short answer section (Your View) of the Teacher Questionnaire.

The first teacher stated:

> *Staff development in teaching English reading skills is never promoted neither in a term nor throughout the year. Therefore, School Z should conduct termly teacher in-service on reading skills, emphasize library corners in each classroom and timetable reading lessons in order to promote the teaching and learning of ERS in the school.*

The second teacher stated:

> *Regarding staff development in teaching English reading skill at School Z, there is none at all.*

The third teacher stated:

> *Not much is done at School Z regarding staff development in teaching English reading skills.*

However, the fourth teacher did not make any comment due to his position as a relief teacher.

This questionnaire data is supported by the following observation data from field notes.

During morning tea, I had the chance to talk with five grade 8 teachers. They were very interested in the courses offered by the Divine Word University's Faculty of Education. I learnt that the teachers wanted to gain new knowledge in their fields of interest and also to upgrade their qualifications. I also found out that the teachers knew the importance ERS but they needed the training, the resources and the time to be able to effectively teach ERS to their students.

This information shows that termly staff development in teaching reading skills is needed to provide teachers with the necessary training and the knowledge to be able to teach ERS effectively.

Conclusion and recommendations

The study found that in PNG, it has been difficult for primary school teachers and their students, who are learning English as a second language, to master English reading and reading comprehensions skills. What came out strongly in the study was that both resources and staff development to support students' learning of ERS were lacking at the urban upper primary school where the research was conducted. The mixed methods approach employed by the study revealed that the school did not have enough text books for students' use and it also did not provide reading books, dictionaries nor thesaurus to support students in learning ERS. The study also revealed that not enough time was given for reading comprehension activities as reading lessons were not specifically scheduled on the school timetable. The study also found that teacher in-service and training on how to effectively teach ERS was minimal at the research site.

Other studies show that teachers cannot effectively teach reading and reading comprehension skills if they are not supported well with the resources, time (Malone & Paraide, 2011; Chee, 2012; Gandara, Rumberger, Maxwell-Jolly & Callahan, 2003), knowledge and skills (Zeegers, 2005; Karabay, Kayıran & Işık, 2015; Woolley, 2010) needed to teach students to master ERS. In PNG, the mastery of English reading and reading comprehension skills will inevitably raise the students' academic performance in all subject areas which are all taught, assessed and nationally examined in the English language. More research needs to be done on this issue because this discussion presents significant findings from one school.

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Teaching of biology at secondary school level in PNG

Paul Anda

Abstract

This paper discusses the findings from a recent study on support for students' learning of biology concepts in PNG upper secondary schools. This was an exploratory case study done in one urban secondary school. A mixed methods approach was used, so both qualitative and quantitative data was collected to inform the study. Purposive sampling was used to select the research site and the participants. Nineteen students and their biology teacher participated in this research. The findings showed that students were of the view that there was only minimal use made of discovery learning strategies that promote inquiry and discovery during the learning of biology knowledge and concepts. The exploratory case study was used in this research because the researcher intended to explore whether biology teachers encourage students to apply the discovery and inquiry learning strategies to learn more about biology knowledge and concepts. This is because discovery teaching strategies can promote advanced thinking skills explained in the Bloom Taxonomy and can enhance higher students' achievements and performance than knowledge transferred methods of learning as pointed out by Cimer (2004) and Ajaja (2013). Students' achievements correlate with teaching strategies used in teaching subject content.

Key words: biology teaching strategies, science teachers' training, support of students' learning of biology concepts, biology students' cognitive development

Introduction

This paper discusses the support provided for students learning biology concepts in upper secondary schools. The support provided in students' learning determines the students' performance and achievement level in examinations. The grade 10 and 12 national examinations show that students' performance in the national examinations in science subjects including biology has been generally low in the recent past years. The biology subject is generally viewed as an easy science subject. However, students' performance in biology is generally at the same low level as chemistry and physics. The general view of the public and media reports on students' performance in the science subjects suggest that students are not performing at the expected level in these subjects. It is not certain why students generally do not perform as well in the science subjects as they do in their other school subjects. This research project intended to gain some in-depth knowledge in order to understand why students seem to face challenges when learning the science subjects, especially biology. This study used the social constructivist theory as a guide to explore this issue. This is because these theories affirm that knowledge is created by learners through their interaction with those they work with in their learning environment and the school environment. The interaction and strategies used to support students when teaching biology and how they are supported in their learning were explored.

Literature review

It has been found that the teaching of science, particularly biology at secondary school level, is challenging as stated by Cimer (2004 and 2007). Cimer carried out studies on effective teaching of biology in secondary schools in Turkey. His study was prompted by students' low performance in biology which is similar to the Papua New Guinea situation. In his study, Cimer found that the teaching strategies used to teach the science subjects correlate with the students' performance. He found that student centered teaching strategies like, research activities and projects produce high academic achievements among the students. It was also found that the variables of teaching and

learning biology concepts include teacher factors and instructional tools, resources and infrastructure facilities.

Other similar studies done by Ajaja (2013) and Mellado, Bermejo, Blanco and Ruiz (2007) have also found that students' academic achievement and performance correlates with teaching strategies used to teach the subjects. Ajaja (2013) in his research on teaching strategies used for teaching in Nigerian secondary schools found that the results on achievement and retention tests show that for those students who were taught using lecture teaching strategies, their academic achievement was low. Those students who were taught using concept mapping teaching strategies also achieved low academically. However, the cooperating learning and 5E learning groups, academic performance was exceptionally high in both the immediate achievement and retention test.

Mellado et al. (2007) also carried out research on a biology teacher's perception of teaching and learning biology. The perception was compared with the classroom practice. The classroom practices were contrary to perceptions. Most teacher centered strategies like lecturing and explaining to students did not facilitate students' active involvement in the lessons. Students were only passive and receptive learners when these teaching strategies were used. Another study conducted in Turkey by Cimer (2011) was on students' view for "what makes biology learning difficult" (p.1). Among the main reasons for learning difficulties were the teachers' teaching strategies. They stated that teaching strategies should be used: "to overcome these difficulties and make biology learning more effective, teach biology through visual materials, teach through practical work and teach biology through connecting topics with daily life" (Cimer, 2011, p.1). He also found that students learnt better when teachers used teaching strategies that made the biology subject content easy to understand. These findings show that students' academic achievement and performance correlates with teaching strategies.

In Papua New Guinea science education, Vlaardingen (2004) suggested that teacher quality did not match the demands of the curriculum. He used the analogy of putting the "cart before the horse?" (p.1). He concluded that PNG seemed to be concerned more with producing the science curriculum before producing qualified science teachers. The formalistic or teacher centered teaching approaches continue and curriculum has been replaced many times over the years. Curriculum changes without training for teachers to teach the new curriculum is like putting the cart before the horse. Teacher training and curriculum development should be done concurrently, or the development of the new curriculum should commence first, then train teachers to used it before implementation commences. In PNG this is generally not the practice and this has contributed to curriculum content not being implemented well at the school level. Students' academic performance can be affected with this kind of practice as reflected in poor results in the grade 10 and 12 examinations. It is important to train teachers well before the new curriculum is implemented so that they can teach and support students' learning well in the prescribed content of the new curriculum.

Guthrie (2015), when discussing teacher centered learning strategies, points out that the mode of teaching employed in many PNG learning institutions is incompatible with student centered learning. The formalistic mode of teacher directed instruction and lecturing to transfer knowledge does not encourage students to actively participate in their lecture or formal lessons and does not promote advanced thinking and creative learning. Guthrie suggested that these need to be replaced with progressive and student centered learning. Though his article does not specifically talk about biology teaching in PNG, the inquiry based teaching and learning strategies could well be used for learning biology.

Methodology

This research study was an exploratory case study. The exploratory case study was selected because the issue has not been explored before and it was a precursor (scoping effort) to identify factors of the research issue on a small scale (context) but in a real (natural) context to collect precise data for correct inferences (Bhattacheryee, 2012, Schell, 2002). This study used mixed methods for data

collection. This can test the reliability of the data collected and also triangulate them. The mixed methods can also enhance a deeper understanding of the research issue through the combination of qualitative and quantitative data (Kumar, 2014, Creswell, 2014). The decision to employ the mixed methods approach in this research already determined the choices for the various instruments that were to be used for data collection. Therefore, questionnaires, interviews and the observation were used to collect data.

Purposive sampling was used to select the research site and the participants. This was because the respondents were readily available and the research site was accessible to the researcher. The purposeful sampling under the non-probability type was used in this case because the participants from the selected research site and participants are similar to that of other secondary school biology learning environments. Ethical clearance was obtained before data were collected.

This study was conducted to answer the following research questions:
1. How are the teachers prepared to teach biology concepts during their teacher training?
2. What teaching and learning strategies are used in class to support students' learning of biology concepts?

Case study

The study was an exploratory case study. It was done in an urban school to gain in-depth information about how students were supported in the learning of biology content. This provided the opportunity to study the issue in a real life context (Schell, 1992). Generalizations can be made to a small extent in this case. Case studies offer the opportunity to do an intensive investigation to collect detailed information. Also, it involves careful observation and emphasis on the events under investigation (Kothari, 2014). Generalisation will be limited because the sample in this research project was small. One character of a case study is to investigate the problem in a natural setting that gives sufficient precise data to make exact and accurate inferences. The precise data was collected from participants.

Findings and discussions

This research explored how students were supported in their learning of the biology subject knowledge in an upper secondary school in the Momase region of PNG. Data were collected from participants on the teaching strategies, biology teachers' training, and facilities and curriculum materials used to support students' learning. This section presents the discussions of the findings from the research.

Teaching strategies

The research explored a number of areas. One of them was the teaching strategies that are used to teach biology to grade eleven and twelve students. It was found that the most dominant teaching strategy used by the biology teacher was a lecturing teaching strategy. Table 1 shows the frequency of the use of the lecture teaching strategy

Table 1 Students' responses on teaching strategy used in biology lessons

	Frequency	Number of students
Lecture teaching strategy	Always	15
	Most of the time	4
	Sometimes	0
	Rarely	0
	Never	0
	Total	**19**

The data in Table 1 clearly indicates that lecturing is the dominant teaching strategy used in this particular biology class for lessons. During the interview with the biology teacher, she stated that she "sometimes" uses the lecturing mode of teaching. This information does not correspond with the students' responses about the teaching strategy for biology, which they deemed was 'always' used or used 'most of the time'. This assessment is supported by these excerpts from both the students' and teacher's interviews.

> *Student A: We must have practical biology lessons and contact with real contexts to allow deeper understanding of the abstract (unreal) concepts.*

Another student had this to say about the biology lessons.
> *Student B: Lessons are only notes/ theory and we do not have practical for these (biology) lessons.*

The biology teacher had this to say about the teacher training that she received to be a science teacher.
> *Teacher: We were not trained according to the curriculum for biology. Training was general knowledge of biology instead of concepts to be taught in class. Different strategies of teaching were not emphasized during my teacher training in the training institution.*

This data is further supported by the following excerpt from a biology lesson observation.
> *Biology lesson observation 1*
> *I noted that the lesson was conducted in the classroom. I also noted that the teacher wrote up the notes on the board and the students copied them into their biology exercise books. This happened throughout this biology lesson. I did not see any discussion among the teacher and students or discussion among the students regarding the notes they had copied from the board. Also the biology teacher talked for about half the lesson to explain notes copied from the board and students were just passive listeners. In this particular lesson students' engagement in learning activities was minimal*

This data suggests that lecturing is the dominant teaching strategy that is used for the teaching of biology content and concepts in this particular biology class.

Facilitator teaching strategy (group discussions)

Another teaching strategy is the facilitator or activity teaching style/strategy.This teaching approach is activity based. According to Kindsvatter, Wilen and Ishler (1998), students are given activities to inquire and discover the solution themselves while the teacher only facilitates. This happens in students' individual and group discussion activities in class. It was found that the facilitator strategy is sometimes verbal encouragement for students to use among themselves out of the class time. From the biology teacher's responses, she said she sometimes encourages the students to work in groups to help each other. This corresponds with the students' responses for the encouragement of facilitator approaches by teachers. Table 2 shows the frequency of teacher's use of encouragement for discussion activities to students.

Table 2: Students response on teaching strategy used in biology class

	Frequency	**Number of respondents**
Encourage group work and discussion on projects	Always	5
	Most of the time	4
	Sometimes	9
	Rarely	1
	Never	0
	Total	**19**

The data in table 2 indicates that the biology teacher sometimes encourages students' group discussions on projects and assignments. The student and teacher interviews provide more information on discussion activities in class for teaching and learning of biology concepts.

> *Student A: We had two discussions in class for our presentation assignment but no discussion for topic learned in class.*

Another student gave this response for this teaching strategy.
> *Student B: We had only one discussion on assessments for all of last week. It was for clarifying the assessment task.*

The biology teacher said had this to say to justify the teaching strategy that she uses to teach biology.
> *Teacher A: The facilitator style for teaching was only mentioned during one education course. We were not trained to use different teaching strategies and their impact on students learning.*

The excerpt from the biology lesson observation by the researcher further supports this data.
> *I observed a biology lesson in the classroom. During this particular lesson, there were no group activities or group discussions. The students only copied notes or listened to explanations from the teacher.*

This data shows that even though the facilitator teaching strategy may be used sometimes to allow students to have discussions among themselves for assignments and projects, there was no evidence for the application of this strategy for lessons in the biology lesson observed. This suggests that the biology teacher prefers a teacher directed lecturing style of instruction.

Demonstrator/coaching style (student centered)

Unlike other teaching strategies, the demonstrator/ coaching style of teaching shows students the ideas by doing a demonstration or example, and allows time for students to do practical investigations and experiments to acquire the biology knowledge and concepts. According to Kindsvatter, Wilen and Ishler (1998), this strategy involves guided discovery and is frequently used in science subjects, like chemistry and biology. The data in Table 3 indicates that, while 4 students agreed the biology teacher demonstrated biology concepts, the rest of the respondents (15/19) felt it was rarely used, never used, or only sometimes used. The biology teacher stated that she uses this teaching strategy only sometimes during her lessons. Table 3 presents the frequency in using this teaching strategy in this particular biology class.

Table 3: Students' responses on demonstrator/coaching teaching strategy used in class

	Frequency	Number of respondents
Demonstrator or coaching strategy	Always	1
	Most of the time	3
	Sometimes	6
	Rarely	4
	Never	5
	Total	**19**

The data in table 3 indicates differing views by the students on the frequency of the use of demonstrations by their biology teacher. The interpretation is that demonstrations may sometimes have been used, but they were not a common feature of methods used by the teacher. These data are further supported by these excerpts from both teacher and students' interviews.

> *Student A: We do not have biology practical for the theory lessons discussed in class.*

Another student made this response to this teaching strategy in biology lessons.

Student B: We should have demonstrations for conducting practical activities to illustrate the theory topics covered in class.

Another student had this to say for this teaching strategy.

Student C: The teacher must do a lot of demonstrations using actual substances for the topics discussed in biology lessons.

The biology teacher during interview made this response for the facilitator instructional strategy.

Teacher: At the college we (trainees) were not involved in organizing and setting practical activities; the laboratory technicians set practical tasks for us. Therefore, I lack knowledge of how to plan or manage practical activities. Also, the teacher training course did not prepare us for this.

This data is further supported by the following excerpt from the lesson observations.

Biology lesson observation

I did not notice an experiment or practical demonstration done. Also, I noticed biology lessons were mostly held in the classroom. Furthermore, I did not notice any demonstrations and coaching for the topic of the lessons. The biology teacher leads the students through lessons but did not organize activities for them other than copying and explaining notes.

The data illustrates that the facilitator/coaching strategy was not commonly used by the biology teacher but may be used sometimes. It suggests that students have few opportunities to actively engage with biology topics and to lead their own learning and construction of knowledge.

Questioning skills

Another teaching strategy is to use different levels of questions in class to help develop students' cognitive abilities. According to Bloom (1956), the higher order questions are those that require student to explain, discuss, analyze, synthesize, evaluate and create information to engage students in higher level development of cognitive abilities (critical thinking skills). Lower order questions require students to name, label, recall or identify aspects of topic information. The teacher's response was that she used both lower and higher levels of questioning.

Table 4: Students' response on low order questioning

	Frequency	**Number of respondents**
Lower order questions	Always	10
	Most of the time	5
	Sometimes	2
	Rarely	1
	Never	1
	Total	**19**

Table 5: Students' response on higher order questioning

	Frequency	**Number of respondents**
Higher order questions	Always	3
	Most of the time	6
	Sometimes	7
	Rarely	1
	Never	2
	Total	**19**

Tables 4 and 5 show the students' frequency responses for this strategy. It was found that most students agreed that lower order questions were more commonly used than higher order questions. The data in tables 5 shows varied responses to the statement on higher order questioning during biology lessons. This suggest that such questioning does take place during biology lessons or it can also suggest that the students may not have understood well what high order questioning and therefore responded the way they did. The latter seem to be case as illustrated by the excerpts from the students and teacher's interviews and the biology lesson observations.

> *Student A: Teachers should teach in a more advanced way and we should have more outdoor investigations, discussions, experiments and field trips*

Another student had this to say for this teaching strategy.
> *Student B: I suggest we need improved teaching and practical skills for learning biology, which allow students to engage with higher levels of learning*

The biology teacher had this to say about the teacher training that she received to be a science teacher.
> *Teacher: During our teacher training program we learnt about Bloom's taxonomy of cognitive thinking. It is easier to ask questions at the lower levels of cognitive thinking. We weren't required to plan questions when we wrote lesson plans.*

The suggestion is that minimal students' development of their higher order thinking occurred during biology lessons. This is further supported by the researcher's biology lesson observation.
> *I noticed that the lesson basically involved students in taking notes from the board. Students were not given higher order questions to help them to develop critical thinking. Also, I observed that lower order questions were asked just to move on with the content planned for within the allocated time for lesson. There was no evidence of the different levels of questioning being purposively prepared in advance for the lesson.*

The data further indicate that little or no higher order questions were intentionally devised to stimulate students' thinking during biology lessons. The data suggests that lower ordered questioning is dominant during biology lessons in this class. It also suggests that the support provided for higher cognitive development for critical thinking is minimal in this particular biology class.

5.4. Conclusion

This study was conducted to answer two research questions: How are the teachers prepared to teach biology concepts during their teacher training, and, what teaching and learning strategies are used in class to support students' learning of biology concepts? Biology is about life and living things, ecological relationships and interactions. An important aspect of learning biology is to enable students to make informed decisions about modifying and interacting with nature. That is important in a culture where the majority of the population are engaged in subsistence lifestyles. The study focused on grade 11 and grade 12. Upper secondary grade 11 units are: living things, nutrition, transport systems, respiration and gas exchange, response to stimuli and reproduction. Upper secondary grade 12 units are: living things, ecology, population, genetics and evolution.

The finding of this study is that the biology teacher felt that her teacher training program focused on mastery of biology content knowledge rather than methodologies for teaching. It was disappointing to note that lecturing and copying notes from the board were the teaching strategies which dominated biology lessons. When specific questions were asked about other types of teaching strategies, it was found that cooperative learning through group work occurred sometimes, demonstrations of practical activities were done sometimes and questioning tended to require lower levels of cognitive thinking. While the teaching of life and living biology topics could involve outdoor learning activities, it was noticed that learning tended to confined to classroom theoretical learning, The challenge for teachers of biology is to engage student learning in realistic contexts for increased and better understanding of

nature and to appreciate how humans influence the natural environment. The conclusion from this particular case study was that there was room for improvement in the pedagogy used to teach biology to engage students in meaningful learning.

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Paul Anda was a student undertaking the one-year full-time Master of Educational Leadership (MEdL) program at Divine Word University in 2017. The article was written as a result of a research project which he did at the time.

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Staff development support for teachers in PNG rural schools

Yerro Junare

Abstract

This paper discusses findings from a recent case study on how teachers are supported professionally through staff development in rural primary schools. Purposive sampling was used to select the research site and the participants. Mixed methods were used, so both qualitative and quantitative data inform the research findings. It is generally known that teachers in rural schools do not participate in district and provincial teachers' in-service training because of communication, terrain and financial challenges. Therefore, the Papua New Guinea Department of Education encourages school administrations in all schools to provide school based in-service training for their teachers to cater for their professional needs. This study found that school base in-service training is not included in the school yearly program for this school site. The teachers are of the view that they need teacher in-services to assist them to support their students' learning well and also assist them to grow professionally. However, the senior teachers reported that no teachers' in-services had been conducted for the teachers before and during the time of the study. This study could not establish whether teacher in-services had been conducted in past years and why it was not on the current year's school program. It is recommended that more research be conducted on school based in-services, especially for teachers in rural schools, and how they have or could benefit professionally from such teacher in-services.

Key words: school based in-services, staff development, professional development, rural primary schools, disadvantaged rural schools

Introduction

Staff development assists teachers to develop the teaching potential in their profession. However, this is generally not top priority in some rural schools and therefore not done for teachers' ongoing professional development. Research literature cited claim that continuous staff development is by far the most important training strategy to improve the standard of teachers and the quality of education in Papua New Guinea (PNG) schools and anywhere in the world. Khan (2012) expresses it in the simplest way that the quality of education is achieved through the quality of teachers.

This paper presents information on how teachers are supported professionally in a research carried out in the school site. It elaborates on the practice of school based in-services in rural school and the factors affecting it. The findings will inform specific authorities to improve school based in-service in rural schools. This will then advance teachers to improve in their teaching profession in-order to impart relevant knowledge and skills to students.

Literature review

School based in-service training is viewed by teachers and educational policy makers as an important tool in most schools (Calabrese and Bowser, 2001). Other studies done by Gulamhussein (2013), Joyce and Bruce (2002), and Khan and Chishti (2012), found that in rural disadvantage schools, school based in-services is an important contributing factor to improving teachers' standards in their teaching practices, increase new knowledge and refresh prior knowledge. Khan and Chishti (2012) found that in-service training assisted teachers to select the right methods of teaching and learning and identify effective ways to presenting content knowledge to students.

Many developing countries view in-service as an important component for teacher professional development. Leu's research (2004, p.3) found that developing countries are turning to school based

in-service programs as the primary means of professional support for both updating and upgrading members of the existing teaching force.

Leu (2004, p.3) also found that though in-service used for staff development is acknowledged as a significant and ongoing program in disadvantaged school, school administrators encounter difficulty implementing it. Some of the challenges school administrators face are; lack of teachers' interest, lack of qualified personnel, and lack of knowledge and resources. Abdol, Carter and Barberton (2013), Kosegi (2015) and Boaduo (2010) research findings show that the failure to deliver effective in-services in school is due to lack of financial support and resources, shortage of qualified trained facilitators to oversee school based in-services in schools, and lack of support from relevant stakeholders and immediate authorities are some major contributing factors. Kosegi (2015) also found that the non-implementation of school based in-services were not implemented well or not at all because school administrations did not do not allocate funding staff development activities and poor relationship between school administrators and their staff. Literature sources cited also suggest that the challenges teachers faced to implement professional development programs at the school level can be improved.

There are many ways school based in-services can be improved and made effective in the school so that teachers can develop in their teaching practices as suggested by Gulamhussein (2013, p. 3-4). His suggested that there should be enough time given to professional development activities, support should be provided when a new program is implemented and teachers have to be training through demonstration of new concepts. Boaduo (2010) in his findings offered two alternatives to support school based in-service and that is to provide more resources and that cooperation should be encouraged among school administrators, parents and teachers. Several researchers agree that the most successful in-service programs are the ones that allow high levels of school staff and community participation and collaboration. Furthermore, Garet, Porter, Desimond, Birman, and Yoon (2001), pointed out that for schools to have effective in-services, they should focus on the core features as; what to understand on curriculum content; their communication with each other; teachers' particular skills and knowledge; types of in-service activities, duration of services programs and collective participation. In addition, Klein (2001) provide some positive alternatives to promoting effective school in-service which are; collaborative effort from everyone involved, well organized and planned in-service activities; clear goals and objectives for the in-service; in-services should be ongoing and for developmental purposes; the principals should be actively involved in the in-service programs and performances of teachers should be rewarded accordingly. According to all the literature sources consulted, the two main factors for positive in-service program in rural schools are collaboration from all parties and resources.

Lakerveld and Nentwig (1996) propose some guidelines to follow for development of effective in-services in schools. Firstly, schools need to identify their internal and external situations, their needs and potential. Next, they should priorities the needs into goals. Objectives are developed from the goals and all teachers are given tasks based on their needs and encouraged to organize and work cooperatively to find ways to assist themselves. They are also encouraged to seek material resources, funds or outside experts for their in-services programs. They are advised that applying these steps can make in-services effective even in disadvantage schools.

As pointed out by Gulamhussein (2013), staff cooperation is an essential component in constructing successful in-services in schools. When staff cooperation is strongly established, it overcomes other challenges and leads teachers to engage in various in-service programs for their professional growth. Through teacher professional development, teachers learn new teaching strategies to provide quality instruction to their students. This allows them to make changes in the way they teach their students, incorporating innovative teaching methods in the classroom. It teaches them how to work with a variety of learning styles, since not all students learn the same way. It also helps teachers to change their day-to-day teaching methods, encouraging them to accept new methods of teaching subject content.

In PNG, the Department of Eeducation is embarking on quality teachers for quality education. This is to ensure the philosophical goal of education, integral human development is achieved. The goal aims to develop a child to be socially, physically, mentally and spiritually developed to prosper in the society (Ministerial Committee Report, 1986). According to the report schools are agent of education. They play a significant role in transmitting knowledge, skills and values to students and motivating them to achieving their potential in life. Teachers' participation in disseminating the appropriate and relevant knowledge, skill and values is recognized as very important. They have to be well trained and equipped with curriculum teaching experiences and their administrative responsibilities. These are achieved through staff development programs and training which is now encouraged at the school level. School in-service programs are aimed to professionally equipped teachers to develop an individual student to achieve the general goal of education (IHD). However, when school in-service programs are nonexistent, minimal, or not used productively then teachers are not prepared well professionally to achieve the philosophical goals. This is an issue that is currently affecting many teachers and children in many rural primary schools.

A study by National Research Institute (NRI) cited in PNG NDoE (2003, p.24) states training of teachers through workshop in not a best way. This is because of the high transportation cost to the workshop site. NRI considered it is important to have school supervisors to assist teachers implement new materials by training them in their own school. In addition, Chee and Magury (2017, p.3) of NRI states ineffective teaching, lack of on-going teacher professional development and implementation of the curriculum, and unqualified teachers are ongoing issues in primary schools, especially rural schools. Because of this they claimed 17 provinces out of 22 provinces scored below the cut of mark in 2013 grade eight exams. This shows that in-services to update and upgrade teachers, qualification is very important especially those teachers serving in remote schools.

Patricia, a female teacher teaching in the remotest part Gulf province told her story of the many problems she faced when met by the European Union Delegation in 2015. One of the greatest challenges she faced is to be equip with right curriculum content so she can disseminate to the students. The in-service training which she undertook to gain the relevant skills and knowledge about the curriculum content was not done at the school level. She has to go out to be trained professionally. From her experiences, it shows that the authorities at the higher education level are giving less consideration to professional development activities as school based in-services at the disadvantage school level.

The PNG NDoE (2009) suggested and advised the provincial education training officers, district education authorities and head teachers to develop annual professional development programs, organize training workshops, and develop learning programs. These significant programs should be ongoing assisting teachers to upgrade and maintain their standard of professionalism, in return developing student to advance in their learning attitudes. The National Plan for Education 2004-2015 (2004, p.51) states that professional development programs should be conducted at the regional and provincial levels by the department of education and provincial division. These programs are not conducted in those levels, however it is left to individual schools to take on board professional development programs, plan and accomplish based on their needs. In rural disadvantage school this is not happening and is not given a priority by the school administration. This is discussed more in the findings of the study.

Methodology

A small study was conducted to identify the effectiveness of school based in-services. It was a descriptive case study and presented a detail account of the problem under study. The research focused on in-services in a school setting and dealt with the interaction between teaching staff about in-services programs. It investigated the behavior of the teachers' towards school based in-services in rural school setting and its implications. A major research question with subsidiary questions directed the researcher to collect appropriate data that informed the study.

The major research question used was;

How are teachers' professional developments in rural school catered for in school programs? This was supported by three supplementary questions.

1. What kind of in-services are offered to support teachers in their professional development?
2. How does the school administration support in-services for teachers in disadvantage rural schools?
3. What are the teachers' views on school in-services at the school level?

The research used non-probability sampling method, which was much more purposive sampling. This is because it covered the specific rural school which was already identified and this provided insight to in-services provided in other rural schools. It involved the appropriate people concerned and those experiencing the problem. Only one rural school was selected and the sample size was small that involved seven teachers because of the challenges they faced. The research was planned this way due to geographical condition, finance, time and permission constraints (Kumar, 2014, Merriam, 1998).

The research used was a mixed methods approach. Quantitative data were collected from the questionnaires and the qualitative data from the interviews and the artifacts.

Results and discussion

Types of in-services offered to teachers

Professional development provided through school based in-services is vital for teachers' professional growth in their teaching career. The participants were asked whether they had been offered in-services in three specific areas. They were asked to rate their levels of agreement on trhe statements provided for these. The level of agreement; SA= strongly agreed, A= agreed, NS= not sure, DA= disagree, SD = strongly disagree. Table 1 presents their scales of agreements.

Table 1: Teachers' responses on type of in-services offered to them. (seven teachers)

Item	In-services offered to teachers	SA	A	NS	DA	SD
1	Teaching methods and skills	0	0	0	3	4
2	Classroom organizations	0	0	0	3	4
3	Other staff development areas	0	0	0	4	3

The data in table one suggests that all participants disagreed with the statements. This may indicate that such in-services in these areas had never been conducted at the school level. This issue was explored further during the interviews. The following excerpts from the teachers' interviews also suggest that school-based in-service is not done in this achool .

> **Teacher 01:** *We have staff meeting timetable and have two or three staff meetings but we never discuss school based in-services. There is no timetable for in-service.*

A senior officer said this about school based in-service.
> **Senior teacher 02:** *Your question about in-service, we have not had any school based in-service yet on any topics. I have a plan and schedule and it is yet to be printed out and given to teachers.*

Observational comment
> *There were no artefacts displayed in the classrooms or staffroom on in-service schedule or other in-service plans. This further suggests that school base in-service is not conducted in this school.*

Generally, these data suggest that no school based in-services had been conducted to support teachers' professional development in this school. This is indicated by the absence of in-service schedule for the teachers. The data also suggest that a teacher professional in-service plan had been done but had not been conducted yet. The study was unable to establish whether teacher professional in-service sessions were conducted after the study was completed because of time constraints.

School administrative support for teachers' in-services

School administrative support for teachers' in-services at the school level and other courses or training in the district or province is very important. The teachers in the school provided information on assistance school that administration gives to them. They showed their level of agreement on support provided by senior officers, BOM (Board of Management) and school administration for short courses and training. It was discovered the school administration did not provide any support for the teachers. Quantitative data from table 2 revels more on that.

Table 2: Teachers' responses on assistance provided

Item	School administrative support	SA	A	NS	DA	SD
1	Senior Officers	0	0	0	4	3
2	Board of Management	0	0	2	1	4
3	School Administration (courses)	0	0	3	2	2

The quantitative data is supported by the qualitative data from the interviews.

This is what teacher 04 said.
> *Teacher 04: For BOM I cannot see any support from them. Also the administration support to teachers for courses or training to us teachers to attend since last year and this year is nothing.*

A senior teacher had to say this about the inservice timetable.
> *Senior officer 02: No, we do not have any in-service timetable. We did not talk about this in our meeting.*

Senior teachers were supposed to conduct in-services to assist their teachers. However, data shows that they have not discussed it in their staff meeting and have not drawn up any timetable to conduct in-services to assist teachers in their professional growth. Moreover, data illustrates that BOM did not support teachers' in-services because there were no school based in-services held. Data also shows that school administration did not provide any assistance to teachers to attend training or courses in the district or province. Data demonstrates that teachers' staff development for teachers' growth in their profession was neglected by the school administration. The reason why this is so is further discussed in table 4.

Teachers views on in-services

In rural schools assisting teachers to enhance in their teaching profession through school based in-services is essentially a positive way forward. The participants at the school site provided their views on impact of in-services, senior teachers' confidence in delivering in-services at the school level and factors affecting in-service program. Data collected suggests that teachers' in-services contribute a lot to their teaching profession. Questionnaire data collected from the participants from the school site elaborate more on that in table 3.

Table 3: **Perception of teachers on in-service programs (7 teachers)**

Item	**Teachers views on in-services**	SA	A	NS	DA	SD
1	Improve teaching profession	7	0	0	0	0
2	Senior officer confidence	3	1	3	0	0
3	Factors affecting in-services	2	5	0	0	0

The quantitative data is supported by the following excerpts from the teachers' interviews.

This is what a teacher who has served for only two years said about the importance of in-services.
> **Teacher 03:** *I really need more in-services in school to know more about the teaching field and make me fit in my teaching. Many new things I have to understand about planning and programming, assessment and evaluation of students' assessment, administrative functions, professional duties, educational policies and acts and many others.*

A teacher said this when asked about senior teachers' confidence in conducting in-services.
> **Teacher 04:** *I think senior officers are good to run in-services but we are not discussing this in our meetings so they are not planning and conducting this.*

Data shows that school based in-service is very important towards teachers' professional development because is assist teachers improve in their teaching profession. Data also shows that senior teachers are confident enough to conduct in-service programs; however, they are not executing this responsibility. Furthermore, data suggest that there are factors affecting in-services and table 4 discusses this.

Teachers' views of factors affecting school based in-services

School based in-services equip teachers with relevant skills and knowledge to be professionally fit in discharging their teaching duties. Teachers' interviewed at the school site gave their views on factors affecting school in-services. The qualitative data gathered suggests several factors affecting these programs. This is shown in table 4.

Table 4: Teachers views of factors affecting in-services (from most to least)

No	Factors	No. of teachers
1	No discussion of in-service	7
2	No planning and programming	6
3	Teachers absenteeism/movements	4
4	Not enough money	2
5	Lack communication with authorities	2
6	Not enough time	2
7	Lack of other resources (diesel, ink)	1
8	No school in-service coordinator	1

Below are three excerpts from teachers' interview.

This is what a senior officer said about discussion and planning of in-services.
> **Senior officer 01:** *The factor I can see affecting in- service is that we are not discussing it in our staff meeting. If we discuss this, we can get ourselves organize, plan and run in-services.*

Another senior officer had to say this on teachers' absenteeism that affects planning of in-services.
> **Senior officer 02:** *Reason stopping me from planning in-service is mainly teacher's absenteeism. When they go to town they spend two to three weeks and do not come quickly*

and during term breaks as well. Also during start of the year we usually start very late in week four or five Because of all these we have less time so teachers are committed to teaching and no time given to other school programs as in-services.

Data shows that the most dominant factor affecting in-services are no discussion of in-services during staff meetings and planning and programming by senior officers. It indicates there is no collaboration between the school administrators and the junior teachers to organized and conduct in-service program. Data also shows that teachers' absenteeism and movement to town have impacts on in-services. This is because teachers do not return on time after breaks or after doing their business in town. Therefore, most time are given to teaching their class. This makes senior officers unable to draw proper plans for in-services. It shows that school administrators are not strict on teacher absenteeism and controlling teachers' movements. Further research can be established to identify more on teachers' absenteeism and movements in rural schools.

Teachers views of improving in-services in school

School based in-service programs assist teachers to develop professionally in their teaching profession. However, this is not the case in some rural schools. There are obstacles mentioned above affects this significant program. Because of this, teachers were asked for their views on how in-service programs can be improved at their school level. Qualitative data from the interview shows that teachers' good cooperation can improve school based. Table 5 provides more details on the data collected on improving in-services,

Table 5: Teachers views on ways to improve in-services

No	Improvement strategy	No. of teachers
1	Active discussion, planning and coordination	7
2	District in-service coordinators	4
3	Having enough money	4
4	Communication with authorities	2
5	Enough time	2
6	Cluster in-services	1
7	Other resources(generator, ink, diesel,, computers)	1

Here are some of the interview responses from the teachers that are shown in the above table.

This is what a senior officer had said about organization and coordination of in-services.
> **Senior offices 01***: To improve in-service in school we teachers need to come together, discussed it in our staff meeting, cooperate together and organized and run our in-service. In the school a teacher should be appointed to coordinate in-service in the school. The district should appoint a trained person to move from school to school, getting views of teachers on areas they need to be in-service on so he can run in-services to help us.*

A junior teacher also gave his view supporting senior teacher 01. This is what he said regarding in-service coordinators and teachers' participation.
> **Teacher 02***: To have good in-services we must have district coordinators, discussed this in the staff meeting and all teachers must participate together.*

The qualitative data shows that the most important and convenient strategy to improve in-services is active discussion, collaboration and planning between all teachers and the school administration. Data also suggest that having a district in-service coordinator to organize in-service help improve the program for rural schools. Moreover, data indicates that having sufficient funds contributes to effective school based in-services as well. This is not for school base in-services but for teachers to attend training or short courses.

Conclusion

The major research question and three support questions were used in the study to identify how teachers' in rural disadvantage schools were supported through staff development program. Purposive sample involving a small sample were involved in the study. From the quantitative and qualitative data collected findings shows that no assistance was provided by the school administration. Lack of teachers' active discussion, planning, absenteeism and movement in and out of school in the findings were major factors influencing ineffective in-services. However, from teachers' perception, having proper discussion, good planning and coordination are the most common influential strategy that advances standard of in-service. Having district in-service coordinator and sufficient funds as expressed by over half the teachers in the findings improve in-service as. The major research question was; 'How are teachers' staff developments in rural school catered for in school programs was answered from the findings collected in the study. It is recommended that further research needs to be conducted because this is a snapshot of the issue.

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The purpose of classroom rules and their impact on students' behaviour

Erico Ijo Hovob

Abstract

The function of classroom rules is to help create an environment that is conducive for effective teaching and learning. This paper argues that the function of classroom rules is often overlooked by teachers, in that insufficient emphasis is placed on helping students to understand the boundaries and expectations that have been established. A case study analysis describes teacher intervention and student perceptions in the classroom related to the use of classroom rules and their value in guiding teaching and learning. The paper includes sample rules and keys to developing and implementing positive rules in classrooms, which teachers can use with their students to create their own classroom rules. When students are involved in the formulation of classroom rules, they claim ownership of the rules; therefore, they are more likely to abide by the rules they have created. This paper further argues that where students do not understand the purpose of classroom rules and the consequences of breaking those rules, they not conform viewing them as authoritative and foreign. Their actions and negative behaviour lead teachers to employ punitive measures, including corporal punishment, which are not appropriate in schools today.

Key words: Classroom rules, classroom environment, corporal punishment, formulation of classroom rules, purpose of classroom rules, student behaviour

Introduction

Classroom rules are usually established when teachers meet with their students in the first few days of school. Yet teachers are not trained in how to construct good classroom rules. Teachers develop their own ideas in constructing rules that best suit their particular classroom situation. The purpose of classroom rules is an area yet to be understood well and addressed appropriately by teachers. This area has been overlooked by teachers, in that not much emphasis is placed on helping students to understand classroom rules and their significance. Students should be involved in the formulation of classroom rules; otherwise their perception of classroom rules can be that they are foreign to them and authoritative. Classroom rules are often perceived as a set of procedures that can be used to control students' behaviour in class during lessons so that better teaching and learning can occur.

This paper discusses the purpose of classroom rules and their contribution to quality teaching and learning. It includes the significance of the research and why it is important to involve students in the creation of the classroom rules and the essence of teaching students the rules and the consequences of breaking these rules.

Literature review

Teachers must involve students in the formulation of classroom rules. Students will generally support classroom rules and adhere to them when they have assisted in the formulation of the rules. Gambrell (2011) asserts that students' participation in this process can generate a feeling of ownership of the classroom rules.

Classroom rules must be written in positive language using action words that convey purpose. Curwin and Mendler (1998) assert that when rules are stated in positive terms, they imply that students act in a more mature and responsible manner, whereas negatively stated rules can convey a negative expectation. Rimm-Kaufman and Sawyer (2004) affirmed that when creating rules teachers need to understand children's relational needs, and must provide guidelines and limits for children's behaviour. Gable, Hester et al (2009) agreed that teachers should have a relatively small number of

classroom rules written positively and age-appropriately. Oliver and Reschly (2007) affirm that providing instruction at children's appropriate level is particularly important because they are simple to understand.

Classroom rules can be interpreted in different ways by both teachers and students. This is why it is vital for teachers to discuss classrooms rules with students so that they can understand the purpose of the rules (Rahman, Jumani et al, 2010). Some authors assert that classroom rules should be made specifically to suit particular situations (Kerr & Nelson, 2006; Maag, 2004), while others argue that classroom rules should be more general to cover varying classroom conditions as well as the daily classroom routines (Smith & Rivera in Gable, Hester et al, 2009). Anecdotal evidence suggest that inconsistent enforcement of the classroom rules is a major source of teacher/student conflict (Gable, Hester et al, 2009). Therefore, teachers after explaining classroom rules should always ensure that students follow the rules in order to prevent future occurrences of misbehaviour.

Classroom rules generate and maintain an environment conducive for children's learning. An orderly and respectful environment allows children to honor the right of the teacher to teach without disturbance. It also encourages children to be supportive of one another's learning. Bicard (2000) states that practical rules can create a learning environment that encourages children to honor the right of all children to learn in a classroom free from disruptions and distractions. Hamre and Piata (2005) explained that in a well-managed classroom environment, the teacher has clear and flexible expectations in line with the classroom rules and routines. When children understand and follow rules, the teacher does not have to use many control techniques. Therefore, classroom rules should be well thought out so that they can create the type of learning environment that is conducive to positive learning.

The primary purpose of classroom rules is to provide positive interactions between teachers and students, yet according to Hardman and Smith (1999) some teachers still misunderstand the potential influence rules have in promoting positive interactions. Students must also be taught the classroom rules so that they can understand their purpose and application in the classroom environment. Johnson, Stoner and Green (1996) believe that if teachers actively teach classroom rules and communicate exactly what is expected of the students, they can be held responsible for knowing the rules and discipline becomes easier. Duke (1982) states that classroom rules call student's attention to the areas of behaviour and to create a strong expectation about what is or is not acceptable. Therefore, it is vital that students are taught the classroom rules at the beginning of the school year and regularly revisit them during the year.

Purpose of the study

The purpose of classroom rules is often overlooked by teachers. Therefore, they not generally explained well to students. This can result in students not being able to understand that rules are done in order to create a friendly and positive learning environment for everyone. Therefore, they do not adhere to the rules. This causes disharmony in the classroom environment. Classroom rules are generally not used for the purpose of creating positive learning classroom environment. In some cases, they are viewed as a tool for exerting authority over the students. The purpose of this study was to witness firsthand how classroom rules were formulated and used in class at a particular school in the Momase region. The study was conducted for two reasons. First, to find out whether students were involved in the formulation of classroom rules and secondly, to find out if the purpose of the classroom rules and the consequences of breaking the rules were explained to students.

Methodology

The qualitative research approach was used to conduct this descriptive case-study at a selected school site. This approach was used due to time limitation and financial constraints. This case-study used the non-probability sampling method where a selected number of participants were interviewed. This was done purposely to obtain more valuable information from a small group in the given time frame.

Semi-structured Interviews

Most of the data was collected through the use of semi-structured interview. A set of open-ended questions were developed for both the class teacher and students based on the overarching question which states: How are classroom rules viewed by teachers and students and how are they implemented and supported by both teachers and students? As anticipated, these open-ended questions prompted respondents who freely expressed their views on the classroom rules and the implementation. The data obtained from these interviews were vital for this study.

Procedure

The two-week case-study was conducted on a grade five class at a particular school site in the Momase region. This approach was used in order to gauge views of the students and teachers on their understanding of the purpose of classroom rules and how the classroom rules were used to create a classroom environment conducive for teaching and learning. During three lesson-observations students' exercise books were checked for evidences of teaching classroom rules. I also witnessed how the teacher and students observed the classroom rules during normal teaching and learning periods. An observation checklist was used to record their observable behaviour. The data gathered from these observations were valuable for my study.

I also collected copies of the classroom rules, student behavioural chart and roll-checklist from the participant class. Similar documents were also gathered from the other grade five classes for triangulation. A copy of the draft school policy and the National Education policy documents were also obtained from the principal. These documents were important for data analysis.

Participants

The student and teacher participants in this study were recommended by the class teacher who also participated in the study. Ten students were randomly chosen from a class of forty-seven students to participate. These students comprising 5 boys and 5 girls were chosen among 29 girls and 18 boys. Half of these students come from settlements and were living with relatives; not biological parents.

Data analysis

The coding technique was used to analyse the data. This made it easier to draw themes from the collected data. Like terms and phrases were grouped under common themes that answered the research questions. In this way, the data was arranged to address the overarching question.

Results and Discussion

The formulation and application of classroom rules

Rules are generally used to create a good classroom working environment for both teachers and students. It is known that many teachers do not involve their students in formulating classroom rules. In order to explore this practice further, the teachers and students were asked whether students were involved in developing the classroom rules. It was found that students were not involved in formulating the classroom rules. The students had been introduced to a ready-made set of classroom rules that had been left behind by the teacher who previously used that classroom.

As explained by the class teacher:
> *The classroom rules were from a grade three class who used that classroom last year and I found them packed away in a box and decided to adopt the same rules for my class because they were written well and in simple English.*

One student was of the view that students should be involved in formulating classroom rules as expressed here:

> *It is good to write our own classroom rules but I cannot write any classroom rules, I can only copy it. … I can write it, sometimes I don't, but if the teacher tells me, I can write it.*

Another student had this to say about the formulation of classroom rules:

> *Sapos mi raitim own klasrum rules blo mi yet em bai gudpla tu. Em bai helpim mi bikos em mi yet raitim. (If I write my own classroom rules for myself it is good too. It will help me because it's I who wrote it.)*

Yet another student added:

> *I think these rules are for the grade threes. It's good but I think we should add on some extra ideas to make up our own rules so we can follow them.*

These data suggest that students were not involved in the initial development of the classroom rules. These classroom rules were left behind by a grade three teacher who previously used that classroom. The rules were haphazardly pinned up on the wall and students were told to follow whatever the classroom rules required of them. This type of practice did not foster students' feelings of ownership of the rules and did not support their implementation either. Students also viewed the classroom rules as authoritative and foreign. This led to students not following the classroom rules.

Sample classroom rules for teachers

Observations conducted as part of the research revealed that, emphasis was not placed on involving students in creating the rules. Teachers wrote rules without paying attention to the structure and nature of the rules. They placed rules on the walls expecting students to read for themselves and follow. Consequently, students did not value the classroom rules and their purpose and significance. I decided to include examples of some positive, negative, and vague classroom rules from Bicard (2000) to assist teachers when writing their own classroom rules (figure 1). I have also included the 'keys to developing and implementing positive rules in classrooms' as in figure 2.

Table 1 Examples of positive, negative, and vague rules

Positive rules	Negative rules	Vague rules
Raise your hand when you want to talk.	Don't interrupt others.	Respect others.
Keep your eyes on the teacher.	Don't look around the room.	Listen to the teacher.
Bring a pencil to class every day.	Don't come to class without a pencil.	Come to class prepared.
Before you leave make sure your desk is clean.	You are not ready to leave until your desk is clean.	Keep the classroom neat.
Be in your seat when the bell rings.	Don't be out of your seat when the bell rings.	Be on time for class.

Bicard (2000, p. 38)

Table 2 Keys to developing and implementing positive rules in classrooms

Characteristics of positive rules
• Positive rules specify appropriate student behavior in observable terms.
• Positive rules specify observable consequences.
Developing positive rules
• Develop a framework before the school year begins.
• Include students in the decision-making process.
• Get agreement by students, teachers, and parents.

> **Using positive rules effectively**
> • Teach the rules.
> • Catch students following the rules.
> • Monitor your behavior.
> • Include students as monitors.
>
> **What to do when students break the rules**
> • Use the least intrusive procedures first.
> • Praise other students for following the rules.
> • Give verbal redirection.
> • Remain unemotional yet firm when intervening.

Bicard (2000, p. 38)

Reinforcement of students' understanding of classroom rules

Classroom rules can be interpreted in different ways by both teachers and students. Therefore, it is vital that teachers discuss classroom rules with students so that they can understand the purpose of the rules. Classroom rules are meant to foster a friendly and peaceful environment for all learners.

Teachers and students were asked whether classroom rules and the consequences of breaking the rules were taught to students.

In response to this question one student had this to say:
> *The teacher did not teach us the classroom rules but just told us to follow the classroom rules. Sometimes we read the classroom rules from the board but we did not write them in the exercise book.*

When asked if the students understood the purpose of classroom rules, this student added:
> *Yes, we understand the rules but we always forget them ...because we did not write them in our books.*

Another student added:
> *I wrote the classroom rules in my notebook by myself, the teacher did not tell me ... because I want to teach myself the rules so I will know them.*

A third student stated:
> *When we came in (at the beginning of the year) she said you must follow the classroom rules.*

When asked how students felt when the teacher said that, this student added:
> *I was scared because if I don't follow the rules the teacher might punish me.*

Still another student added:
> *She told us about the classroom rules but we did not write about the classroom rules because the teacher only explained the rules, she did not tell us to write them.*

The class teacher had this to say about teaching classroom rules:
> *I did not really teach them the classroom rules but I only explained the rules by pointing to the rules. Students know the rules because they see them every day and I point to the rules while talking to them about the classroom rules when they don't follow the rules.*

Again, classroom observations reinforced the fact that there was no evidence of students being taught the classroom rules. For example, there were no written notes about the classroom rules in the students' exercise books. This suggests that the students were not taught the classroom rules. According to the data, the students were only shown the classroom rules, explained the rules and told to follow whatever the classroom rules required of them. As a result, students were hesitant in

following the classroom rules. This led the teacher to apply corporal punishment as a consequence of their misbehaviour.

Consequences of breaking the classroom rules

When students are not involved in the formulation of classroom rules, they tend to disregard the classroom rules and their expectations since they have no ownership over the rules (Duke, 1982; Bicard, 2000). Additionally, when students are not taught the classroom rules, they have minimal knowledge of what the rules required of them. Therefore, students do not follow the classroom rules. Students were asked what the consequences are of breaking their classroom rules. Their responses are captured in the following excerpts:

One student stated:
> *Sometimes if we don't follow the rules, like walking around the classroom, the teacher will tell us to stand behind our desk and she will get a big stick and whip us on the legs and say these legs help you to move around.*

Another student added:
> *When I do not follow the classroom rules she pinches my ears or she hits my hands with a stick. Sometimes she tells me to stand in the front and put one leg up with my hands on my head.*

All ten students interviewed had similar sentiments regarding corporal punishment.

The class teacher had this to say about corporal punishment:
> *When students do not follow the rules I feel very angry because they are not following the rules. They know that they are not supposed to do that particular thing but they go ahead and do it. I do not really punish them but just pull their ears and tap their shoulders and show them, the rules are on the walls. If children make mistakes I tell them that the thing that you have done is not good, it's wrong. You are not respecting the other children; the rules are there. That's first, second, that's the same thing on the same day, and then third, fourth, ok, that's ok, you stand up, out from your table, stand in front. Just put your hand on your head and your leg up. That's all because you do not want to do the right thing. You want to do this bad thing so just stand there until I am satisfied then you can come and sit down (she laughs). Before they sit down I call them and explain why you were up in front, do you know your mistakes? Next time don't do this again. You are here for one purpose is for learning. Your parents sent you here for you to get knowledge and not to do this nonsense. They have no profits, so aim here is for your study in school and whatever work is allocated for you by the teacher you have to do it. You are not here to play around because your future is in your hands. This is for your own good to be somebody in the future.*

These data suggest that students are given corporal punishment in varying forms when they break the classroom rules. This teacher's behaviour is in breach of the Department of Education Behaviour Management Policy.

The class teacher defended her actions towards students for not following the rules. According to this class teacher, physically hurting a student for not following the rules was not a harsh punishment; rather, it was a way of correcting them to be good students while in class and in the future as good citizens.

The Behaviour Management Policy for the National Education System of Papua New Guinea guides all teachers on how to treat students under their care. Corporal punishment is forbidden in classrooms in current times. The Behaviour Management Policy for the National Education System of Papua New Guinea 2009, section 4.2.2 states:

"Be fair, prompt, calm and consistent when dealing with student misbehaviour. Teachers must not use any form of violence or corporal punishment. Sanctions should never deliberately cause physical, emotional or mental harm to students" (NDOE, 2009, p. 16).

This is further supported by the Papua New Guinea Teachers Association (PNGTA) Teacher code of ethics, section 1.6 (PNGTA, 2004, p. 2) which requires teachers to safeguard and promote the interests and well-being of students and make every effort to protect students from bullying and from any form of abuse.

The students were asked about their view on corporal punishments meted out by the class teacher. The following excerpts from a group interview capture their responses.

One student said:
I like the punishment because it's good and very good because it helps us to be a good person. It will also stop us from doing the bad things.

Another student added:
I like the punishment because we will learn from our mistakes. What the teacher is doing is okay. It will help us to be good people in the future.

There were three others who also agreed that corporal punishment was good for them. In a study into the history of corporal punishment across the world, it was reported that people "who were spanked, themselves tend to be more supportive of corporal punishment than those who were not spanked" (Gershoff, 2010 p.32).

In traditional Papua New Guinea culture, the young people are expected to have respect for the elders or someone older. Therefore, students in class would naturally accept whatever the teacher offers them with due respect. Likewise, these students may have accepted corporal punishment as a way of correction from the teacher to be good citizens.

The other five students in the group, on the contrary, said that they did not like corporal punishment because it was painful and that made them fear the classroom rules. This group consisted of three boys and two girls who were generally well behaved children.

As one of the students stated:
I do not like the punishment because sometimes it will not help us too. If she beats us all the time we will not listen to her. But we all listen because we are scared.

Another student added:
Sometimes she hits us on the hands or legs. I don't like the punishment because it gives me pain. I think the teacher should only talk to me instead of hitting me. If there is no rule we can play.

A third student added:
I get scared of the rules because nogut tisa blo mipla bai tok upla ino bihainim classroom rules na bai upla kisim pen. Olsem na mi les lo kisim pen so mi mas stap isi tasol. Mi no laikim displa punishment we tisa save paitim mipla. Tasol mi laikim tisa bikos em save lanim gut ol samtin lo mipla. (I get scared of the rules because in case our teacher might say you are not following the classroom rules and so you will be punished. I do not like getting belted so I must stay quietly. I do not like this punishment where the teacher often belts us. But I like the teacher because she often teaches us well.)

Still another student added:

> *Sometimes I get upset because she used to hit my legs and tell me to stand there for a long time. I like the teacher but I do not like the punishment. She should give us another type of punishment but not hitting us all the time.*

A fifth student concluded:

> *I do not like this punishment, mi no laikim bikos mi laik stap isi lo class. Mi save poret lo tisa paitim mi. (I do not like this punishment, I just want to work quietly in class because I feel frightened of the teacher hitting me.)*

These data show that students did not like corporal punishment. They felt that the teacher should use an alternative method of punishing them because corporal punishment only inflicted pain on them. Corporal punishment was making them feel scared of the rules and the actions of the teacher. They felt that corporal punishment was depriving them of their rights and freedom to interact with one another in class, hindering their ability to learn freely and stopping them from expressing their views in class.

Teachers often think that exerting corporal punishment on students will make them improve their behaviour for fear of receiving the same punitive treatment the next time they break the rules. However, according to Skinner's theory (2014) of behaviourism, corporal punishment only controls their behaviour temporarily; it slows their negative behaviour but does not completely stop it. Students would be likely to react to the harsh treatment in a more negative way than to be receptive towards it.

Classroom environment

The classroom environment must be conducive for teaching and learning to occur (Singh, 2014). A conducive classroom environment is one that is well organized with simple rules and instructions to guide students in their daily activities. The teachers and students were asked how helpful the classroom rules were in terms of managing students' behaviour during lessons. The students' responses, suggest that the classroom rules generally play a vital part in helping students settle to do their work and promote good citizenship among students. In doing so it protects them from harmful activities.

In order to gain more insight into the different classroom environment, all grade five teachers were asked how helpful the classroom rules were in the management of students' behaviour during lessons.

In response to this question one teacher had this to say:

> *I see that classroom rules are a guide to help students in their learning. Classroom rules minimize the behaviour of students who are stubborn, disobedient and aggressive. Because of these classroom rules, some of them have changed.*

Another teacher added:

> *I think classroom rules really help because by talking to the students verbally, sometimes they are kids and they won't get things and put them into their minds and follow them so I think classroom rules really help. You do not have to remind them. When they are doing something that is not right, their friends will remind them, classroom rules are there.*

The third teacher added:

> *If the rules are being followed, then the class will be well managed. Student supervision is very important. We can give them anything but we have to be there for them to see whether they are learning or not.*

The other teachers had similar responses to classroom rules. This study suggests that teachers were of the view that the classroom rules were used to guide the students' behaviour in class. It also improved

their attitude towards learning. When students followed the classroom rules, this helped teachers to manage the classes well. Although classroom rules were in place, student supervision was still paramount.

Teaching and learning in classroom environment and observable student performance.

Optimal teaching and learning occurs in a classroom that is well managed with students engaged in meaningful activities. An important purpose of the study was to find out how teaching and learning occurred in class. Therefore, the class teacher was asked how she helps students understand the activities, and whether students generally work quietly during the lessons.

In response the teacher explains:

> *I explain activities with examples for them to understand; students raise their hands to speak and have respect for other's views. Then they work on the activities. Students' general attitude towards learning is satisfactory. Not all students follow the rules. It's just few who follow the rules. Some of these children, their father is married to a new wife and their mother is married to a new husband so some of these children are homeless. They are living with others, their guardians and come to school and their behaviour is very different from those who are living with their parents.*

This data shows that the teacher helps students to understand activities by providing notes and explaining tasks step by step with examples. The teacher's motherly approach to students wins their respect for her. The students are generally very respectful and well-behaved and only a few who come from broken families tend to misbehave.

Through observation, the crowded classroom with wobbling desks makes working difficult for students. This sometimes makes the teacher inconsiderately apply irrelevant punishment on students for not completing tasks. The research uncovered that other guidelines and daily classroom routines were established apart from the classroom rules. These guided individual students to be responsible.

Detailed observations show that the class was well organized into four working groups. After the teacher's explanation on group work, students tried to work in their subject activity groups with a leader in control; but the students' interactions were either minimal because they were conscious of violating the classroom rules or hyperactive as if the classroom rules never existed. This data further suggests that, although the teacher helps students understand the activities well, the students' actions and responses reflect that they were not free to interact with one another in their groups because they were not fully aware of the classroom rules and the consequences of violating the rules.

Students' initiative and responsibility

It was observed that, the students were left entirely under the control of class captains from 8 o'clock to 8:45 every morning. The captains would open the classrooms by eight o'clock and the class would organize themselves for morning devotion led by a student rostered for the day. The devotion finished in 15 minutes. Then the class would be without a teacher for the next 25 minutes controlling one another for silence. I gathered that, despite the noise, students were responsible. They tried their best and carried out their daily tasks responsibly as outlined on the duty roster but they could not initiate silent-reading or own learning tasks. They were too young to be settled to tasks without adult supervision. If there was work prepared to do after the devotion that would keep them busy.

Conclusions

This study found that the purpose of classroom rules was generally not taught or explained well to students. Therefore, students did not understand that rules were made in order to create a friendly and positive learning environment. Students were not given opportunity to participate in the formulation of classroom rules and therefore they did not claim ownership of the rules. Classroom rules were

developed by teachers alone or collected from elsewhere and haphazardly posted on the walls for students to follow. Consequently, the students' perception of classroom rules was that they were foreign and authoritative. This meant that students may not comply with the classroom rules and, in turn, this caused disharmony in the classroom environment which led the teacher to apply corporal punishment.

The students had mixed feelings about corporal punishment. Those who liked corporal punishment said that it helps them to become good citizens. While others who did not like the punishment said that it was hurtful and preferred alternative methods to corporal punishment.

This research obtained responses from the participants through interviews, observation and gathering artefacts that addressed the overarching question. A qualitative research approach was used in this study to gain an in-depth understanding of the issue. The qualitative research approach was chosen in order to obtain valuable responses from some participants at a selected site within a short period of time and at low cost.

This study was conducted using the conflict, behaviour and socio-cognitive theory as the main theoretical lens to understand the concepts through which the classroom rules were formulated, and to describe the participants' perceptions of the purpose of classroom rules. These theories also helped me to collect and analyse the data.

There has been no research done in Papua New Guinea regarding the purpose of classroom rules. This study is small therefore a similar study should be conducted at a larger scale in Papua New Guinea to explore the issue with classroom rules further. It is strongly recommended that teachers should involve the students in the formulation of classroom rules so that they themselves have ownership of them.

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To cite this article

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Appendix 1: Program for the Faculty of Education Inaugural Research Symposium, 5ᵗʰ October 2017 in the SVD Memorial Auditorium

Greeting guests on arrival: Ms Irene Wrakuale & selected full-time MEdL students

Opening remarks: Associate Professor Joseph Kekeya, Dean, Faculty of Education

Launching of the symposium: Professor Pamela Norman, Deputy President and Vice President Academic

Keynote address: Associate Professor Patricia Paraide, Faculty of Education Research Coordinator

Presenter 1: Mr Erico Havob

Presenter 2: Mr Henry Baining

Presenter 3: Mr Pulip Lyokao presenting on behalf of the team of authors - Associate Professor Patricia Paraide, Dr Lynus Yamuna, Mrs Daphney Atua & Mr Pulip Lyokao

Presenter 4: Mr Yerro Junare

Presenter 5: Ms Erita Yawi

Presenter 6: Mrs Stephanie Bolnga

Presenter 7: Mr Peter Paul Kaiyeke

Presenter 8: Mr Paul Anda

Presenter 9: Ms Eunice Woktop

Presenter 10: Fr Alphonse Dende

Panel discussion on 'support systems to lift research at all faculty levels': Mr Bentley Simeon, Associate Professor Patricia Paraide, Mr Samoa Mariko, Professor Patrick Gesch, Dr Alphonse Aime and Associate Professor Miriam Dlugosz

Presentation of certificates: Professor John Burton, Deputy Vice President Research & Higher Degrees

Closing remarks: Professor Philip Gibbs, Vice President Research & Higher Degrees

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