About Journal of Education and Practice

The scope of Journal of Education and Practice (JEP) include, but not limited to, Innovative Responses to the Challenges of the 21st Century, Alternative Preparation Programs, Teaching and learning of different subjects, teaching in the developed & developing countries, Education, Mental Illness, and psychology, etc. The journal is published in both printed and online versions.

Journal of Education and Practice is published by IISTE and follows a monthly publication schedule. General inquiries and Paper submission: contact@iiste.org or JEP@iiste.org

Index of this journal

IISTE's acknowledgements to the supports from co-hosting universities worldwide

- University of North Carolina at Charlotte, United States
- California State University, United States
- The City University of New York, United States
- Aristotle University of Thessaloniki, Greece
- Universiteit Leiden, Netherlands
Acknowledgement of Editors and International Reviewers

Prof. Dr. Abraham George  
Indian Institute of Technology Kharagpur, India

Prof. Dr. Chandan Kumar Sahoo  
National Institute of Technology, India

Prof. Dr. T. Feng  
China Academy of Science, China

Prof. Dr. Eugenio Cianfone  
Università degli Studi di Messina, Italy

Prof. Dr. Y. Feng  
Peking University, Beijing

Dr. Maizam Alias  
Universiti Tun Hussein onn Malaysia, Malaysia

Dr. Ahmed Ali Abdel Sater  
Assuit University, Egypt

Dr. Andrew Yau-hau Tse  
Universiti Malaysia Pahang, Malaysia

Dr. Normah binti Othman, SMP.,  
Universiti Malaysia PAHANG, Malaysia

Dr. Zulnaid Yaacob  
Universiti Sains Malaysia (USM), Malaysia

Dr. Hugo Yu-Hsiu Lee  
National Institute of Development Administration, Thailand

Dr. Noor Mohammad,  
Multimedia University, Malaysia

Dr. Ajay K. Das  
Murray State University, United States

Dr. Venus S. Solar  
Manila Central University, Philippines

Dr. Ahmad Nazari  
London Metropolitan University-UK

Termit Kaur Ranjit Singh  
Universiti Sains Malaysia, Malaysia

Dr. MUJIBUL HASAN SIDDIQUI  
Aligarh Muslim University, India

Dr. Izaidin Abdul Majid,  
Universiti Teknikal Malaysia Melaka, Malaysia

Dr. K.V. Madhavi,  
GITAM University, India

Dr. Dickson S. Ondiek Owiti  
School of Education, Rongo University College, Kenya

Dr. Walter H. Persaud  
Mahidol University International College, Thailand

Odhiambo Odera  
University of Southern Queensland, Australia

Dr. Andaleeb Abu Kamel  
Al-Zaytoonah University of Jordan, Jordan

DR. ABDULKARIM ISHAQ,  
University of Maiduguri, Nigeria
# Table of Contents

**Articles**

- Gender, School Climate and Job Satisfaction as Correlates of Job Absenteeism among Selected Secondary School Teachers in Osun State, Nigeria  
  *Muraina Kamilu Olanrewaju, Oderinde Olayinka Ibiyemi*  
  1-8

- Education of the Gifted/Talented Students in Nigeria: A Justification  
  *Akintunde Dada Oluseyi, Fagbemi, Oluogun Olujide*  
  9-11

- Politics and the Appointment of Council Members, Vice Chancellors and other Principal Officers in Federal and State Universities in the North Central States of Nigeria  
  *Akpakwu, Ocheme Simon, Okwo, F. A*  
  12-20

- The Impact of Social Media on the Academic Performance of University Students in Nigeria  
  *Okereke, C. Ebene, Lucky U. Oghenetega*  
  21-24

- Evaluating Religious Education in Nigerian Catholic Schools  
  *Leonard Chidi Ikechukwu, Felix Okechukwu Ugwuozor*  
  25-32

- Industrial Attachment in Polytechnic Education: An Approach to Polytechnic-Industry Nexus in Human Capital Development of Selected Polytechnics in Ghana  
  *Norbert Adja Kwabena Adjet, Daniel Adjebong Nyarko, Victor Fannam Nurnam*  
  33-49

- Educational Intervention Program to Tackle Health Risk Behaviors among Male Secondary School Students (Tawjehi) in Khan Younis Governorate - Gaza Strip  
  *Yehia Ahmed Abu Musameh, Mona Sadek Shenouda, Soheir Ali Badr El-Dien*  
  50-61

- Measurement of Self-Concept of Athletes in Selected Sports in Rivers State, Nigeria  
  *J.B. Vipene, V.C. Emeribe*  
  62-66

- Methodology: A Foundation for a Good Research  
  *Esierie, Owoyo Akinyenene, Charles Obot*  
  67-71

- Influence of Value Creation on Job Satisfaction of Vocational Educators in Tertiary Institutions in Edo and Delta States of Nigeria  
  *Robinson Osarumwense Owemhiegie, Sunday Oghor Osuyi*  
  72-79

- Managing Teachers Resources for Improving Quality of Education:An Experience from Gorontalo, Indonesia  
  *Arfin Suving*  
  80-84

- Quality of Life and obesity among Female Employee at Assuit University  
  *Fayza M. Mohammed, Soheir A. Bader El-Din, Soad S. Bayomi, Neama M. El Magrabi*  
  85-91

- Small and Medium Scale Enterprises (SMEs): A Catalyst in Promoting Economic Development in Nigeria  
  *Ineokparia, P.O., Edighonya. Kennedy*  
  92-98

- Effects of Computer Based Mastery Learning on Secondary School Students' Motivation to Learn Biology by Gender  
  *Peter K. Ronoh, Monica Ndonga*  
  99-105
Managing Teachers Resources for Improving Quality of Education: An Experience from Gorontalo, Indonesia

Arifin Suking
Faculty of Education, State University of Gorontalo
Email: arifin_suking@ung.ac.id

Abstract
The purpose of this paper is to discuss the policy strategy in managing teacher resource in Gorontalo regency, Indonesia. The strategy, which using to manage teacher resources consists of teacher need assessment, rolling teacher, multi-grade teaching and in-service training. The analysis of strategy was carried out through the comparison of the advantage/strength and the weakness of each strategy. The analysis result shows that rolling teacher proves to be the best alternative solution to manage the problems in planning, assigning, distributing, placing, and developing the teachers. The result of this analysis could be the best alternative strategy for the government of Gorontalo Regency, in order to deal with the problems found in the management of teacher resource in continuing and consistent ways.

Keywords: Policy strategy, teacher, resource, Gorontalo regency.

Introduction
Experiences gained by all nations in the world, including Indonesia, have taught us that teachers becomes the main factor in an effort to elevate the quality of national education system through their direct role in learning process. In the literature, there is a large amount of reports and publications discussing the role of teacher in improving quality of education from different perspective (Leu, 2005; Fredriksson, 2004; Adebiyi, 2009; A. Marphatia, et al 2010). In such context, teachers take a role as spearhead in realizing and actualizing the learning, as well as reviving the various expectations and ideas of ideal education as manifested in curriculum (National Education Department, 2007).

Contextually, there are two important issues facing by the government of Indonesia related to teacher resources. They are the quantity and quality of teacher. Based on the teacher ratio in comparison to the amount of learners, the amount of teachers is not sufficient yet. Needless to say, such condition requires more careful and accurate management that includes the process of planning, assigning, placing and developing. Along with the implementation of decentralization, most accountability in managing teachers is being shifted from the central government to the local government and the role taken by the central government is only limited to the area of national policy and coordination. In terms of such alteration, any issue in relation to the renewal of teacher management becomes collective challenge both for central government and local government. As consequence, the relevant data analysis on regional condition and school in the framework of policy determination is required.

In addition to teacher assignment and placement, central government and local government also meet the issue of teacher professionalism. Therefore the central government issued Act no. 14 2005 on Teacher and Lecturer. The act determines that all teachers must meet S1 or D4 for the least education qualification and pass the certification test as the proof of professional competency for educator in any education level. The implication of such regulation is soon found in the following criteria and authority of Educational Institution for Education Manpower (LPTK) whose main role is to prepare teachers and other institutions that have role in implementing the ongoing professionalism development for in-service teachers. In order to be regarded as professional teacher, any teacher must meet criteria such as sufficient academic qualification, physical and psychological fitness, and required competence in accomplishing the goal of national education, (Government Regulation number 74, 2008). Such endeavor is hopefully led to the proper provision in terms of quantity, competence, qualification, and distribution and in order to meet the objective, the favorable mechanism to produce synergetic cooperation in accordance to the Governmental Regulation No 19, 2005 on The Standard of National Education.

In relation to such attempt, in 2005 The General Directorate of Educator and Educational Manpower Quality Improvement (PMPPTK) that belongs to The National Education Department, with the support from World Bank, analyzed aspects in relation to teacher assignment and placement, both from policy side and practice in field. In his address during the launch of program BERMUTU, the minister of national education said that the shortage of teacher quantity and quality becomes the significant concern in implementing education in many regions, especially in remote ones. In company with opportunity to improve competence, welfare and information access prove to be specific obstacles that all local teachers experience. Consequently, the equal dissemination of opportunity for all teachers, teacher distribution, and teacher welfare, especially for those in services in remote area, turn out to be the aspects that require serious attention from both government and other interest groups.
Method of Policy Analysis
The applied method for the analysis is the policy analysis released by the government of Gorontalo Regency with an analysis unit that includes the real condition analysis on education data in relation to the planning and analysis of teacher need, distribution and competence development. The analysis belongs to policy research because the analysis process is carried out to apprehend the basic social issues so the result can be recommended for policy maker in order to be able to take action in practical fashion in dealing with the issues. The analysis also shows some policies that have been implemented by local government and illustrates the management of teacher manpower in resolving some problems, policy assessment accompanied with the weakness and strength of each policy, and finally the determination of policy regarded the most proper one for the local condition and situation.

Review of Strategy in Managing for Teacher Resources
The development of educational sector nowadays in Gorontalo Regency turns out to be the main sector and becomes the priority so as expected it can extend into main capital in regional development. However the current problem that must be dealt with is that geographically Gorontalo regency has vast area with extended mountainous region and as a result the educational mapping and teacher condition and placement have not obtained most attention yet.

Real condition shows that many schools have undergone the decline of student registration in annual fashion because some schools are located nearby (no more than 1 km or 20 minute distant away). According to data from Gorontalo Regency Education Office, there are eighteen (18) schools located nearby. Four (4) schools are located in two different villages, so only 14 schools can be possibly merged into seven (7) schools spreading in four sub-districts (kecamatan). The data also reveals that some schools have few students (less than 90 students) and those schools cannot be merged because their locations are far apart. There are 17 schools that have relatively few students. They are 15 elementary schools and 2 Islamic Schools scattered in five sub-districts: Kecamatan Tabongo, Tilango, Pulubula, and Mootilangi. Teachers are not distributed into those schools in equal manner. Some schools endure the shortage of teacher, while some other schools have surplus teachers so as a result, the replacement or redistribution is needed.

Basically Gorontalo Regency is divided into urban, sub-urban and rural (remote) areas. The discrepancy found in three areas can be seen in the factual evidence that the core- and high performing teacher are assembled in urban area, many teacher who do not meet graduate program (S1) as the determined qualification are still found in sub-urban area, and many contract teachers (GTT) or teachers who teach subjects that are not compatible with their educational background are still in service in rural area.

Based on available data, the number of elementary teachers is amounts to 2146 teachers and 1864 teachers have not met the qualification as teacher and these teachers spreading in 17 sub-districts (kecamatans) in Gorontalo Regency. After looking at such condition in more precise fashion, more effective and efficient management of teacher is seriously needed. The following description shows some strategies that have been implemented by local government of Gorontalo Regency in relation to the management of teacher resource in an effort to meet the issues on teacher planning, placement, distribution and development

1. The assessment of teacher need
In evaluation encyclopedia arranged by Anderson and colleagues, the need analysis is defined as a need process and the determination of priority scale at the same time. The need analysis is a way or method to recognize the difference between the expected condition (should be or ought to be) and the actual condition (what is). The expected condition is often called as real or true condition. In educational context, the need here is defined as condition that shows the discrepancy between actual condition and the expected condition. "Need" functions as the distance between the actual output and the expected output. According to Kouffman (cited in Withkin, 1984), he defined assessment as the formal analysis that demonstrates and stores between the expected products and the actual products, manages the priority, and selects the need in an attempt to find the solution.

Withkin research (1984:15) on need assessment for high education used factor analysis to identify six assessment elements: "(1) educational goals or philosophy given as a of departure, (2) need identification and need prioritization, (3) selection, (4) treatment implementation, (5) evaluation, and (6) recycle.

Based on the discussion, it can be stated here that the assessment of education need is a process of components in education that include: personnel and school physical facilities. In terms of the planning for teacher need and school building, the need assessment covers the rate of dropout or the inclination of student course, school location map, and the demography of population under compulsory education. The following is the objective of educational need assessment: (1) to meet the financial requirement from government and demonstrate that the conducted program is able to solve the unsolvable crisis, (2) to recognize the level of public need in terms of education and its requisites, (3) to reach the consensus on the objective for institutional level planning and inter-institutional arrangement among the related institutions in certain area, (4) to identify which
program is innovative and able to support the endeavor to solve the determined problems or extend the learning activities and compatible for various parties, (5) to estimate numerous facilitations in developing extracurricular activities, (6) to encourage the teaching improvement and development and promote the efficient implementation of curriculum, and (7) to analyze the need of information and program implementation (Witkin, 1984).

Based on the projection of teacher demand for five years that has been carried out by the Directorate of Professional Educator in 2009, the province of Gorontalo needs 6437 teachers and out of the estimated number, Gorontalo Regency needs 1247 subject teachers for subject and 713 class teachers. The projection does not really differ from the result of research carried out by Ansar and Masaung (2009) stating that from the projection of teacher need for elementary level (SD/MI) for academic year of 2009-2013, Gorontalo Regency requires 643 teachers but the same research also shows the result stating that the shortage of teacher is experienced only by schools in sub-urban and rural areas while schools located in urban area of regency capital city experience the surplus of teachers. From the available fact it can be concluded that the discrepancy in an effort to meet the teacher demand still exists.

2. The Multi-grade Management

Veenman (1997) defined multi-grade class as a class in which students from different grades are taught by a teacher in the same room. In multi-grade learning model as one of learning strategies, a teacher merges classes (two classes or more) and differences in capacity level at the same time. Multi-grade class is the merging practice that unites learners from different grades adjacent to each other in a series, for example first grade and second grade or fourth, fifth, and sixth grades. In the multi-grade class, students from different grades are taught by the same teacher in the same class and such practice usually takes the whole academic year. In order to have better planning and more effective implementation, one multi-grade class should be taught by the same teacher for at least two academic years and the teacher should be able to teach different grades in the same school. In teaching students in the multi-situation class, a teacher teaches more than one grade or age group. (Little, 1995).

Multi-grade teaching as an instructional design requires a situation in which school requires children more than one class to be taught altogether and learning is set on certain activity in accordance to the level of each grade that provides opportunity for all children to gain the similar benefit from their learning experience. (National Education Institute, Sri Lanka, 2003). Some researchers use similar intertwining terms between multi-grade and multi-age (Bennet et al., 1983 Pratt, 1986). USA, Canada, England, Finland, Netherland and Sweden are countries that have already implemented mono-grade and multi-grade learning system in conducted fashion.

Based on the result of evaluation carried out by The Education Office of Gorontalo Regency, in the implementation of multi-grade some weaknesses are still found. Few of them are that not all teachers who handle multi-grade class have the knowledge and the competence as required for multi-grade learning and students show lack of capability so teachers are always demanded to apply various strategies in order to implement teaching in effective way. However in the other side, the implementation of multi-grade class offers effective way to solve the shortage of teachers, especially in sub-urban and rural areas. Much expectation is given to the local government to keep implementing multi-grade class learning through the improvement of those weaknesses and better.

3. Rolling Teacher

Rolling Teacher is a method in which a teacher is given a task to teach and/or get involved in the development of education quality in other schools, different schools from the one she/he is in service, for certain period of time without any necessity to transfer from her/his original school (Antor, 2010). Rolling teacher is a system of transferring teaching task periodically in regency or city areas (The General Directorate of PMPTK, National Education Department, 2009).

In general, the objectives of rolling teacher implementation are; (a) to distribute learning quality equally to all schools that still demand teachers, (b) to distribute the professional competence and quality of teacher equally and to distribute teacher workload equally, (c) to lessen the overburdened workload experienced by teachers who are in service in remote area, and (d) to equally improve the teacher competence/performance in all schools. Meanwhile, the rolling teacher offers the following benefits; (a) offering good accessibility for teachers in order to improve their professional competence and capacity as well as their qualification (S1) without having necessity to abandon their teaching task, (b) providing policy space for teachers to meet their teaching-hour load requirement for 24 hours per week , (c) improving the efficiency in the education management in regency area, (d) for teachers conducting rolling teacher system, providing opportunity to continuously improve their performance and competence in terms of pedagogic, professional, social and personality areas and (e) for certified teachers, offering chance to demonstrate their competence and continuously improve their professional capacity through their participation as rolling teacher.
Rolling teacher for elementary level (SD/MI) is assigned for the fifth grade (5) for four subjects: Mathematics, Social Knowledge, Science, and Language. Therefore the core teacher who participates as rolling teacher takes role as subject teacher in elementary level (SD/MI). Teacher feasible as rolling teacher is the core teacher assigned through the decree of Education Office Head. The assignment is based on the assessment of school supervisor. Based on some trials carried out by some schools in Gorontalo Regency, the implementation of rolling teacher is considered effective because some schools in shortage of teachers feel relieved by the presence of other teachers. Meanwhile, for teachers who have not met the requirement of 24 hour/week teaching-hour load, they can use the program and take part as rolling teacher to meet the required teaching-hour load. For students, the benefit of the program is that students feel motivated and don’t get bored because of various learning atmosphere due to the changing teachers.

4. In service training

In-service training is regarded as effective method to improve teacher’s knowledge, skill and self-confidence in positive way. This method is a process used by teacher to continue their education after receiving teaching and working professionally (Locke, 1984). Education Network Information in European Union (Eurydice) defined training as activity and practice in which teacher gets involved in order to extend their knowledge, improve their skill, and assess their professionalism (Perron, 1991).

In-service training is a term that illustrates a series of activities and requirements in terms of professional development, organized to improve the pweformance of all personnel (teachers), in-service or taking certain position in schools, so they can implement the program or innovation. (Sapp, 1996). According to Purwanto (1984) in-service training is any activity given to and received by educational personnel, (principal, teacher, etc) that aims to add and improve knowledge, proficiency, and experience among teachers in conducting their task and responsibility. In-service training program could include various activities such as the provision of course application, speeches, teacher meeting to share experience, seminars, visits to other schools in other regions, special preparation and participation in courses that have relation to main task. In service training activity is one of main factors in developing professional teacher and providing the opportunity to improve knowledge through teachers’ active participation (Sait & Saitis, 2006).

In quantity in-service training in Gorontalo Regency is seldom implemented because in-service training program requires relatively high budget. Such condition gives small opportunity for teachers to participate in it. Empirically, in-service training program offers benefit to teachers in developing their capacity and competence and the management of such training can be more effective.

In the following table, the author shows the analysis result on some policies viewed from their strengths and weaknesses:

<table>
<thead>
<tr>
<th>Policy Type</th>
<th>Advantages/Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher need assessment</td>
<td>Be able to recognize the amount of demanded teachers</td>
<td>Can’t be put into realization directly because the implementer must wait for the budgeting process</td>
</tr>
<tr>
<td></td>
<td>Gain alternative and solution to deal with the shortage of teacher</td>
<td>Require accurate data to proceed the assessment</td>
</tr>
<tr>
<td>Multigrade class</td>
<td>Be able to solve the shortage of teacher and school building</td>
<td>The implementation process need relatively longer time and higher cost because firstly the implementor must conduct field survey</td>
</tr>
<tr>
<td></td>
<td>Be able to save teaching time</td>
<td>Require expert for the process of need analysis</td>
</tr>
<tr>
<td></td>
<td>Teacher is challenged to be more creative in learning process</td>
<td>Not all parties accept the analysis result</td>
</tr>
<tr>
<td></td>
<td>Teacher competence is not equal yet</td>
<td>Require more effective time management</td>
</tr>
<tr>
<td></td>
<td>Teacher is challenged to keep improving his/her competence</td>
<td>Require teacher to have more creativity, innovation and competence</td>
</tr>
<tr>
<td></td>
<td>The education quality can be distributed equally to the target schools</td>
<td>Accomplishment level of curriculum is not complete</td>
</tr>
<tr>
<td></td>
<td>Teaching atmosphere is fresher because teacher often moves</td>
<td>Not respect the individual differences among students</td>
</tr>
<tr>
<td>Rolling teacher</td>
<td>The shortage of teacher can be solved</td>
<td>Geographically, schools are located far apart and spread in some areas</td>
</tr>
<tr>
<td></td>
<td>Gain teacher with good quality</td>
<td>Require more well-prepared planning</td>
</tr>
<tr>
<td></td>
<td>Assist teacher to meet the requirement of 24 hour/week teaching-hour load</td>
<td>Require better map because teacher often moves to teach</td>
</tr>
<tr>
<td></td>
<td>Be able to improve teacher welfare because of the availability of incentive</td>
<td>Teacher feels challenged to keep improving his/her competence</td>
</tr>
<tr>
<td></td>
<td>Teacher feels challenged to keep improving his/her competence</td>
<td>The education quality can be distributed equally to the target schools</td>
</tr>
<tr>
<td></td>
<td>Teaching atmosphere is fresher because teacher often moves</td>
<td>Teaching atmosphere is fresher because teacher often moves</td>
</tr>
<tr>
<td>In-service training</td>
<td>Improve teacher competence and capacity</td>
<td>Require relatively high budget</td>
</tr>
<tr>
<td></td>
<td>The management is more effective</td>
<td>There could be more chances for teacher to leave the class because of his/her participation in training</td>
</tr>
<tr>
<td></td>
<td>The accepted material is not continuous and makes the participants bored</td>
<td>The implementation time is so limited and lack of initiative among participants exists</td>
</tr>
<tr>
<td></td>
<td>The implementation time is so limited and lack of initiative among participants exists</td>
<td>Not all teachers have opportunity to participate in training</td>
</tr>
</tbody>
</table>
Based on the analysis result, author concludes that rolling teacher is more effective policy because this policy is regarded as having more strength compared to other policies. This policy brings positive effects on students, teachers and principals. For instance, this policy can solve the problem of limitation both on quality and quantity. With rolling teacher, such school can have additional teachers with better quality (Kusumawati, 2009). In regulatory area, the policy to implement rolling teacher has been manifested in each local regulation so its implementation is stronger and better guided.

Conclusion
The policies issued and implemented by the government of Gorontalo regency include; teacher need assessment, multigrade learning, rolling teacher and in-service training. In their implementation, it is evident that each policy has strength and weaknesses. The analysis result shows that the most effective alternative policy is rolling teacher policy because this policy offers many positive effects and is regarded the most appropriate one for the geographical condition of Gorontalo regency.

From the analysis result, for policy maker it is recommended that before issuing any policy, the policy draft must be put into the process of effect analysis and the implementation of the policy must be continuous and consistent.

REFERENCES
Ansar & Masaong. 2009. Asesmen Kebutuhan Guru dan Gedung pada Pendidikan Dasar (SD/Mi, SMP/MTs) dalam Rangka Wajib Belajar 9 tahun di Kabupaten Gorontalo Provinsi Gorontalo. LEMLIT UNG.
Sam Fransisco: Jercey-Bass Publishers.