TYPE STUDY TO IDENTIFY THE PERFORMANCE OF 4000 STUDENTS IN THE EXACT SCIENCES ABOUT FOUR NATURAL’S AREAS IN GUINEA 2012

Mr. Alhassane Toure, PhD
Zuo Guoxin, Ass Professor
Central China Normal University, China

Abstract
This is a comparative study of four natural regions of Guinea on basis of the marks obtained in 2012 by students in three subjects of exact sciences (Math, Physics and Chemistry). We have demonstrated method of the type of investigation. This is based on all candidates of the 2012 session of the unique option mathematical science in Guinea, a sample size of 4,000 students; 1,000 students from each of the four regions. We will use inferential statistics to know the mean of the four regions. This type of comparison between the four regions is employed to determine the student’s level of understanding in the exact sciences in Guinea, and to explain general problems relating to education systems through students’ achievements. In addition, we tried to give some explanations about the causes of the results and finally to put evidence to the contribution of national and international organizations in the education system in Guinea and finally to try to explain some remarks about the factors for the effectiveness of the teacher in a general way while using the SPSS software.

Keywords: Type Study, Exact Sciences, Guinean Students, Natural areas, SPSS

Résumé
C’est une étude comparative des quatre régions naturelles de la Guinée sur la base des notes obtenues par les élèves dans les trois matières de sciences exactes (mathématiques, physique et chimie) en 2012. Nous avons eu à démontrer une méthode du type d’enquête. L'étude est basée sur tous les candidats de la session 2012 du baccalauréat option unique Sciences Mathématiques en Guinée. La taille de l’échantillon est de 4000 élèves, dont 1000 étudiants par chacune des quatre régions.
Nous utilisons la statistique déductive pour connaître la moyenne des quatre régions. Ce type de comparaison entre les quatre régions est utilisée pour déterminer le niveau de compréhension des élèves dans les sciences exactes en 2012 et d'expliquer les problèmes généraux relatifs aux systèmes d'éducation à travers les notes des élèves. En outre, nous avons essayé aussi de donner quelques explications sur les causes et raisons des résultats enfin de mettre en évidence la contribution des organisations nationales et internationales dans le domaine de l'éducatif en Guinée et surtout d'expliquer quelques remarques sur les facteurs d’efficacité de l’enseignant de manière générale tout en utilisant le logiciel SPSS.

Mots clés : Type d'étude, les sciences exactes, les étudiants guinéens, régions naturelles

Introduction

The Republic of Guinea, initially known as Guinea of Sekou Toure, is a country located in the West Coast of Africa. She got her independence in 1958. With land coverage of 94,900 square miles, it is limited by Senegal and Mali to the north, Côte d'Ivoire to the east, and Liberia and Sierra Leone to the south (see fig 1). It has a population of 10,628,972 inhabitants according to the results of the last general census conducted in March (reported the RTG) and with an estimate which presents four major tribal groups: 35 percent Peul (Fulani), 30 percent Manlike, Susu 20 percent, and 14 percent Kissi. The official language is French. There are several of other languages and dialects. By religion, 85% are Muslims, 8% of Christians, and 7% animists. The Republic of Guinea was the only French colony in Africa to opt for national sovereignty in favor of the Gaullist referendum on 28 September 1958. One consequence of this rupture with France was the French withdrawal of personnel of the colonial administration, including teachers of colleges and high schools (Djénabou Baldé, 2011).

The country is today witnessing changes in her education system. This dynamics have increased the school enrollment rate as well as the high score performance. We can see the quantitative and qualitative progress in the changing educational system with a positive increase from 30% in 1990 to 80% in recent time. Guinea is divided into four natural regions including: the Lower Guinea or Guinea Maritime, Middle Guinea, Upper Guinea and Forest Guinea covering respectively 18%, 20%, 40% and 22% of the national territory (see fig 1).

Teaching in the interior regions of The Republic of Guinea faces enormous challenges, especially with the reforms that have been brought about by the New Systems. These reforms began right after her independence, and in the words of Balde “the Republic of Guinea has
experienced far-reaching reforms of its education system after its accession to independence in 1958. These mutations, structural type for all levels of the education system, thus resulting in a series of renovations programs and study plan (Djénabou Baldé, 2011).

The quality of teaching and learning is directly linked to the working and living conditions of the teachers. To improve the quality of education, it is necessary to improve the recruitment, training, social status and working conditions of the teachers. With relevant knowledge, skills and personal qualities, professional opportunities and appropriate working conditions the teachers are well equipped to perform. *(Jacques Delors (1996) cited by Seddoh, Komlavi Francisco (2003)) Education is important in economic and social development. Thus, with three ministries in charge of education, namely the Ministry of Education Pre-University and Civic Education (MEPU-EC), the Minister of Technical Education and Vocational Training (MET-FP) and the Ministry of Higher Education and Scientific Research (MESRS), Guinea has been able to improve her education system up to a desirable level. Even with the three ministries, the performance of students in the interior parts of the country in the exact sciences is still quite low. This poor performance in three regions in the exact sciences is not yet fully identified in spite of the researches by national and international institutions, researchers and even the pedagogues. The government has proposed several strategies in the context of the training that would improve the level of students especially in the exact sciences. For example, UNESCO, the World Bank, UNICEF and other NGOs have provided a lot of educational materials in the country to facilitate the ease of learning the exact sciences, especially physics. The challenge experienced by the exact sciences in these interior originate from pre University Level where the learners fail to get the first principles of the subjects. The fears of past failures in the subjects then make the situation even worse. The teaching of this discipline in the last three Region (Middle Guinea, high Guinea and forest Guinea) was a total surrender at the teachers and those pedagogical responsible for some reasons of the country (See the position of four regions on the Figure).

In this article, we made a comparative study between the four natural regions of Guinea based on the marks obtained by 1000 students in the exact sciences

---

2 MEPU-EC: Ministry of education pre-university and Civic Education is a National Literacy Service within the country.
3 MET-FP: The Ministry of technical education and vocational training is a service based on training technical and professional in the field of education in the country
4 MESRS: Ministry of higher education and scientific research is responsible for training higher and the scientific research
5 See the position of four regions on the Figure: Guinea is a country divided into four regions where the last three are the lowest level of school examinations.
(Mathematics, physics and chemistry) in each region, the 2012 session in the four areas in the country. It is considered for students as regards the hardest exact sciences. As told (Kolawole, 2004) the case of mathematics: is the bedrock, queen and king of all sciences to achieve this, we use SPSS software to compare the mean and variance of the four regions. SPSS indeed is a powerful and popular tool in statistical inference for the comparing of products and resources. This method of analysis is very important to analyze the average including population, numbers etc. Its popularity in general, is due to the fact that it is robust enough to non-normality of the data (see Conover, Johnson & Johnson, 1981). Better analysis of variance tends to be less affected by violations of the model assumptions than other methods. We had to follow a procedure of statistical analysis ANOVA (analysis of variance). In fact, in this paper we present a comparative study of several strategies to help determine the level of exact sciences students in different natural regions of Guinea. In addition, we try to give some explanation of the causes of the results and then highlight in general the contribution of national and international organizations in the educational system in Guinea. Finally we have given some remarks about the factors for the effectiveness of the teacher in general way.

![Figure1 the Representative map of the four natural regions of Guinea](image)

**Research Questions**

The study responds to the following questions:

- What was the general descriptive statistics for the four natural regions?
- What is the average score of students in the four natural regions in exact sciences in 2012?
- What were the causes of these disparities in averages of students of the four natural regions?
Hypotheses

H₀: The average score of students in the four natural regions of Guinea is equal in the exact sciences exams.

H₁: The average score of students in the four natural regions of Guinea is not equal in the exact sciences exams.

Research Method

This article was based on the design of a descriptive study focusing on the type of surveys.

This has been well examined on a logical basis, which has allowed the investigator to have a better idea on the representative sample of the population concerned.

The investigator intended to study the variation in scores of students in the four regions Guinea.

Population: In this article, the study population is composed of all students in High school level, taking mathematical science option in the four natural regions of Guinea. During the study period, we selected 40 public and private high schools in the country.

Sample and Sampling Techniques: A total of 4000 students made up of 1000 students per natural regions were selected from 16 high schools graduate using random sampling technique. In the first stage 8 prefectures, out of a total of 36 in the Country, were selected randomly; two from each of the 4 natural regions. In the second stage, 12 schools were selected randomly from the eight prefectures and each of the sampled schools, 250 students were selected randomly. The random sampling method, allowed fast and very accurate determination of population study.

Instrument for Data Collection: The Primary data was collected using interviews while the result of the final scores in the exact sciences was obtained from the Ministry of Education. These notes allow knowing very well the level of students in the four regions through exact sciences.

Administration of the Instrument: Thanks to the heads of institutions and some friends of researchers in charge to the account department of secondary education and the help of some teachers that we had the chance to collect data in the presence of the researcher.

Method of the Data Analysis: On this part on the comparison of the yields of pupils has through the four natural regions. We had to use the following methodology, which is based on a highly visible and yet descriptive design strategy that is based on a sample of 4000 students high
school graduates (candidates for the unique baccalaureate)\(^6\) within the Republic of Guinea including the steps from to are as follows:

Step 1: Selection and collection of the scores obtained in the exact sciences.

Step 2: The distribution of data across the four regions selected

Step 3: Verification of the data was through the types of tests for normality of our data that are:

3-1 The Kolmogorov Smirnov Test\(^7\)
3-2 The Shapiro-wilk Test
3-3 Verification of the Box-plot and Histogram

Step 4: Highlighted a description of data

Step 5: The test of homogeneity of variances

Step 6: Using the anova test

Step 7: Test for multiple comparisons (Tukey and Tamhane)

Step 8: Make a note and draw a conclusion.

### Table 1 Normality test

<table>
<thead>
<tr>
<th>Title of areas</th>
<th>Kolmogorov-Smirnov(^a)</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Maritime Guinea</td>
<td>.027</td>
<td>1000</td>
</tr>
<tr>
<td>middle Guinea</td>
<td>.028</td>
<td>1000</td>
</tr>
<tr>
<td>upper Guinea</td>
<td>.025</td>
<td>1000</td>
</tr>
<tr>
<td>forest Guinea</td>
<td>.026</td>
<td>1000</td>
</tr>
</tbody>
</table>

\(\text{• }\) Lillie for significance correction

This table shows us that these data are really normally distributed with significance value of the Kolmogorov-Smirnov is greater than 0.05 (sig> 0.05). For more details with the data that are lower in 2000, we applied the test that is best suited to these kinds of data. The Shapiro-wilk test with values of p-values, which is in the last column that allows us to conclude that our data are normally distributed

![Figure 2: Box-plot of different regions](image)

\(^6\) Candidates for the unique baccalaureate: This is an examination supervised by the state, which happens only once in the year from the month of June.

\(^7\) The Kolmogorov Smirnov Test: This is a very powerful test that allows checking the normality of distribution
We find in the first box plot, there are an outlier and also in the fourth box three outliers. General way of the simple form of the box plot show 5 sample statistics that are the minimum, lower quartile, median, upper quartile and maximum. In our representation we are remarks that all the five parameters are not the same. We observe that the box plot of the samples of 1000 points of the four natural regions is symmetric. The line is near to the centre of boxes and also we see that the whiskers are identical.

Fig:3 to 6 These histograms show the normal distribution of scores obtained by the students through in the four naturals regions in the exact sciences

**Question One:** What was the descriptive statistics general of the average of the exact sciences students through the four natural regions?
**Table 2: The scores**

<table>
<thead>
<tr>
<th>Scores</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>S.E</th>
<th>Lower bound</th>
<th>Upper bound</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>middle Guinea</td>
<td>1000</td>
<td>9.3252</td>
<td>2.88265</td>
<td>.09116</td>
<td>9.1463</td>
<td>9.5041</td>
<td>3.01</td>
<td>16.43</td>
</tr>
<tr>
<td>upper Guinea</td>
<td>1000</td>
<td>9.1825</td>
<td>2.76665</td>
<td>.08749</td>
<td>9.0108</td>
<td>9.3542</td>
<td>3.05</td>
<td>16.58</td>
</tr>
<tr>
<td>forest Guinea</td>
<td>1000</td>
<td>9.0910</td>
<td>2.70814</td>
<td>.08564</td>
<td>8.9230</td>
<td>9.2591</td>
<td>2.18</td>
<td>17.46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4000</td>
<td>9.4449</td>
<td>2.80866</td>
<td>.04441</td>
<td>9.3579</td>
<td>9.5320</td>
<td>2.18</td>
<td>17.85</td>
</tr>
</tbody>
</table>

This analysis is the comparison of the average of the four natural regions of Guinea, whose notes were the score of exact sciences of school year 2012. The first table shows the descriptive statistics of the four regions, with 1000 notes of student randomly selected by region. The number was 4000 in total, with the averages: 10.1810, 9.3252, 9.1825, and 9.0910. The confidence interval for the mean was estimated at 95%

**Table 3: Test homogeneity of variances**

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.489</td>
<td>3</td>
<td>3996</td>
<td>.059</td>
</tr>
</tbody>
</table>

Table 3 shows homogeneity of variance, the P-value is equal .059 greater than 5% the value of alpha. We are obliged to accept equality of variances that allow us to continue to use anova

**Table 4: Anova**

<table>
<thead>
<tr>
<th>Title of scores</th>
<th>Sum Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>750.203</td>
<td>3</td>
<td>250.068</td>
<td>32.448</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>30796.147</td>
<td>3996</td>
<td>7.707</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31546.350</td>
<td>3999</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our table4 allows us to say that F follows a law of Fisher-Snedecor has 3 and 296 degree of freedom. The function F is equal to 6.009 and also the critical function F at the 5% based on the Fisher-Snedecor. We observed that Sig value < Fisher value.

In conclusion we will describe the results as follows. We observed a disparity between the average of student across the four regions and P-value equal to 0.000 who is less than 5% reassures us to reject the null hypothesis.
### Table 5: Multiple comparisons

<table>
<thead>
<tr>
<th>(I) Title of areas</th>
<th>(J) Title of areas</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>scores of maritime Guinea</td>
<td>middle Guinea</td>
<td>.85577*</td>
<td>.12415</td>
<td>.000</td>
<td>.5367</td>
<td>1.1749</td>
</tr>
<tr>
<td></td>
<td>upper Guinea</td>
<td>.99848*</td>
<td>.12415</td>
<td>.000</td>
<td>.6794</td>
<td>1.3176</td>
</tr>
<tr>
<td></td>
<td>forest Guinea</td>
<td>1.08993*</td>
<td>.12415</td>
<td>.000</td>
<td>.7708</td>
<td>1.4090</td>
</tr>
<tr>
<td>scores of middle Guinea</td>
<td>maritime Guinea</td>
<td>-.85577*</td>
<td>.12415</td>
<td>.000</td>
<td>-1.1749</td>
<td>-.5367</td>
</tr>
<tr>
<td></td>
<td>upper Guinea</td>
<td>.14271</td>
<td>.12415</td>
<td>.659</td>
<td>-.1764</td>
<td>.4618</td>
</tr>
<tr>
<td></td>
<td>forest Guinea</td>
<td>.23416</td>
<td>.12415</td>
<td>.234</td>
<td>-.0849</td>
<td>.5532</td>
</tr>
<tr>
<td>scores of upper Guinea</td>
<td>maritime Guinea</td>
<td>-.99848*</td>
<td>.12415</td>
<td>.000</td>
<td>-1.3176</td>
<td>-.6794</td>
</tr>
<tr>
<td></td>
<td>Middle Guinea</td>
<td>-.14271</td>
<td>.12415</td>
<td>.659</td>
<td>-.4618</td>
<td>.1764</td>
</tr>
<tr>
<td></td>
<td>forest Guinea</td>
<td>.09145</td>
<td>.12415</td>
<td>.882</td>
<td>-.2276</td>
<td>.4105</td>
</tr>
<tr>
<td>scores of forest Guinea</td>
<td>maritime Guinea</td>
<td>-1.08993*</td>
<td>.12415</td>
<td>.000</td>
<td>-1.4090</td>
<td>-.7708</td>
</tr>
<tr>
<td></td>
<td>middle Guinea</td>
<td>-.23416</td>
<td>.12415</td>
<td>.234</td>
<td>-.5532</td>
<td>.0849</td>
</tr>
<tr>
<td></td>
<td>upper Guinea</td>
<td>-.09145</td>
<td>.12415</td>
<td>.882</td>
<td>-.4105</td>
<td>.2276</td>
</tr>
</tbody>
</table>

The mean difference is significant at the 0.05 level.

### Title of scores Tamhane

<table>
<thead>
<tr>
<th>(I) Title of areas</th>
<th>(J) Title of areas</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>scores of maritime Guinea</td>
<td>middle Guinea</td>
<td>.85577*</td>
<td>.12585</td>
<td>.000</td>
<td>.5243</td>
<td>1.1872</td>
</tr>
<tr>
<td></td>
<td>upper Guinea</td>
<td>.99848*</td>
<td>.12322</td>
<td>.000</td>
<td>.6740</td>
<td>1.3230</td>
</tr>
<tr>
<td></td>
<td>forest Guinea</td>
<td>1.08993*</td>
<td>.12191</td>
<td>.000</td>
<td>.7689</td>
<td>1.4110</td>
</tr>
<tr>
<td>scores of middle Guinea</td>
<td>maritime Guinea</td>
<td>-.85577*</td>
<td>.12585</td>
<td>.000</td>
<td>-1.1872</td>
<td>-.5243</td>
</tr>
<tr>
<td></td>
<td>upper Guinea</td>
<td>.14271</td>
<td>.12635</td>
<td>.834</td>
<td>-.1900</td>
<td>.4755</td>
</tr>
<tr>
<td></td>
<td>forest Guinea</td>
<td>.23416</td>
<td>.12507</td>
<td>.316</td>
<td>-.0952</td>
<td>.5636</td>
</tr>
<tr>
<td>scores of upper Guinea</td>
<td>maritime Guinea</td>
<td>-.99848*</td>
<td>.12322</td>
<td>.000</td>
<td>-1.3230</td>
<td>-.6740</td>
</tr>
</tbody>
</table>
The fifth table is for the multiple comparisons (post hoc tests)\(^8\). It explains both methods Tukey and Tamhane because the samples are the same size. According to the analysis of Turkey, the mean of student of maritime Guinea has a significant difference compared to the other three regions. The middle Guinea there is a slight difference with the other two (upper Guinea and Forest Guinea) but the upper Guinea and forest Guinea the difference is little significance. As we have rejected the null hypothesis then the test of Tamhane was necessary. **Homogeneous subsets**

<table>
<thead>
<tr>
<th>Title of areas</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>scores of forest Guinea</td>
<td>1000</td>
<td>9.0910</td>
</tr>
<tr>
<td>scores of upper Guinea</td>
<td>1000</td>
<td>9.1825</td>
</tr>
<tr>
<td>scores of middle Guinea</td>
<td>1000</td>
<td>9.3252</td>
</tr>
<tr>
<td>scores of maritime Guinea</td>
<td>1000</td>
<td>10.1810</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.234</td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed.

The Homogenous Subsets output is produced by a request for post hoc tests and addresses the same questions as the Multiple Comparisons table for post hoc analysis. The interpretation is that: This table is considered more appropriate because student numbers are the same 1000 for each region. The notes of each region are really different. We also explain that with the means plot, which will give us a visual representation of natural trends.

---

\(^8\) Post hoc tests: are planned for situations in which the investigator has already obtained a significant omnibus F-test with a factor that consists of three (3) or more means and additional exploration of the differences among means is required to give specific information on which means are significantly diverse from each other.
areas and their linear relationship. Such a line graph can help to interpret the results.

![Graph showing the scores of the four natural regions in Guinea.](image)

**Fig 7: The graphic representation of the scores of the four natural regions**

**SITUATION ANALYSIS**

In recent years, the university faculties, government, schools authorities, and other relevant stakeholders have been giving an increasing importance to the intellectual development of Guinean students both at home and abroad. The harmonious development and transformation of the educational system in Guinea involves the commitment of parents, teachers, government, Non-Governmental Organizations (NGOs), students and other educational professionals. The problem of underdevelopment in universities and schools, and the dismal performance in core sciences subjects in our country is a reflection of the fruits of limited educational infrastructural facilities, socio-economic problems and the existing policies. To overcome these challenges, the government and its authorities have embarked on educational reforms, transformations and development which includes; economic and social policies, communications efficiency (languages), curriculum development, orientation, attitude and behavioral changes on management and administrative styles, seek nationalism, and requirement of international cooperation. (JB): School education plays a key role in the process of socio-economic integration of children in their communities. It’s because the school offers pupils the supportive learning environment, knowledge, skills, the social norms, culture and traditions (the formation of the personality). Given these great utilities public authorities, the parents and with support from teachers are the resources needed to ensure quality education of child. As a result of these impacts, the Guinean government and the relevant authorities have established and engaged in building and construction of schools in all highly populated areas, through grants-in-aid and support from INGOs and NGOs.
Education is a tool and instrument for the development of a country, keeping peace and social conflicts and linking countries and people in all works of life. In this 21 century; the 1961 educational conference held in Addis Ababa Ethiopia, states that, in way to keep peace with European and African countries (May 15-25, 1961), the European union, in collaboration with UNESCO and the Economic Commission of the United Nations, will engage not only to achieve universal primary school but also to provide quality education through convenient learning and teaching environment.

From our analysis, we try to provide evidence that will explain and justify the three basic concerns and major problems facing the Guinean educational system:

1-The absence of demanding control and supervision of the Ministry of education to schools, pupils and its authorities

2-Human Resource Development and Capacity Building of Teachers

3-The role and supervision of parents in the teaching and bringing up of a child

4-The contributions and support of National and International organizations to the education system in Guinea

1-The Absence of Demanding Control and Supervision of the Ministry of Education to schools, pupils and its authorities

Guinean coast appears as an attractive area on two levels, (Commercial and agricultural areas) the concentration of the population is visible at the regional and at national level. As in the other cases it as results of dual movement from cities to the most interior areas. The Maritime which is the first and natural region, occupied 80 % of the activities of the country; the polarization is expressed primarily by the growth of the urban fabric and commercialization in bigger towns and cities like Conakry. The other major industrial cities (Kamsar- Fria) or commercial (Kindia) attract people from few corners of the country. This trend has now spilled over on to the teachers too who prefer to abandon their teaching posts and schools in the countryside, sourcing the benefit and opportunities in most commercialized and economically stable cities. The lack of control structures and supervision from the ministry of education, and other government agencies have encouraged and created room for absenteeism and abandon of schools, and pupils during normal school calendar in remote areas. This problem has been systemic and it’s eaten in the heart and fabric of the development and success of education at national level.

Perhaps money is not the sole source of happiness, but it is vital in ensuring quality education between teachers and pupils, as a result of this, corruption and corrupt practices in the educational system have erupted. Subject to the low income and wages receive by teachers and other
authorities, thus teachers and authorities move to big cities where they can make quick money and get lot of opportunities. Their meager wages and conditions of services do not allow them to give maximum support needed from them to the pupil and school authorities.

So to address the above problems of corruption, Ural and urban migration of teachers that is leading to poor educational standards;

Government and other relevant stakeholders in the educational sector need to focus on improving the living conditions, standards, wages and salaries of teachers.

Create motivational initiatives schemes that will cater and attract teachers in the interior, particularly the core sciences teacher. According to our analysis, the poor performance of students from the three regions (middle, upper, and forest Guinea) it’s as a result of corruption within the ministry, lack of train and qualify teachers and limited teaching and learning materials in the rural areas. This is what explains the poor performance of pupils in the core sciences in these three regions.

The ministry of education must step up and act fast to overcome this problems, by introducing and implementing policies and regulations that will enhance Controls, develop educational supervision, set administrative structures and management, mobilization of resources and enforcement of laws and regulations both government and other key stake holders in the educational system.

The contribution and support of INGOs and NGOs such as the World Bank, IMF UNICEF, GOAL, China International Fun for Development (CIFD) and concern World Wide, is off important. As they have competent, skills and expertise in tackling problems of education and social issues. Altinok, Nadir. States indeed, the importance of INGOs and NGOs in terms of providing aid and loans for education development in Africa, have justify the need for their intervention on training and developing of core sciences teaches in Guinea, in a way to reduce the massive failure and poor performance of pupils in all public exams.

The provision of expertise to undertake research on education and other social-economic issues, have proven the unique ability and strength to tackle and find solutions to upgrade the academic performance of pupils

2- Human Resource Development and Capacity Building of Teachers

If we agree that the school is more important than home and that internal factors school are paramount, so it is necessary to focus on the training of teachers so that they are able to overcome the shortcomings of traditional education and teach more effectively (Gertler, Paul J, 2011). Since 1984, liberalization has favored the creation of private schools. But with the lack of qualified teachers and poor teacher training, the results became
catastrophic. Based on our analysis, it is urgent to take head on the training of teachers is an essential need. Teacher training must be coupled with the construction of new facilities and renovation of existing ones. Then our regression analyses indicated the level of students within the country is felt. So to stop this regression, it is therefore necessary to train enough teachers while putting in suitable to accurately and efficiently perform their duties. It’s like giving seminars for the teachers, also to increase the level of their education and also to give them regulatory examinations so, that they can improve their teaching skills. As in some countries the teacher training has become a most important area at the level of the education sector. And who is directly affected by the reforms that these countries have tried to implement, through the thoughts that we can isolate, measure and generalize a set of criteria to determine whether this teacher, measurement and such training is important taking into account of the standards of quality that have been determined. We can say the really reason of the failure of students in the three regions.

Poverty is the main reason for their effectiveness. Finally, it is noted that any change in the training practices of teachers in level the extent of the territory must bring at least support the school authorities. This will result in the evolution of all other sectors across the whole country (Gertler, Paul J, 2011).

3- The role and supervision of parents in the teaching and bringing up of a child

At first many factors contribute to lower educational participation in rural areas. On the demand side, rural children may be less interested in attending school. First, the opportunity costs of attending schools are often higher in rural areas.

Second, parents in rural areas often have a lower level of education, and may attach a lower value to schooling. The perceived lack of relevance of schooling may be enhanced by a rigid curriculum, often designed for a context (and sometimes culture) removed from that in rural areas (Mulkeen, Aidan, 2005).

The lack of education's level of parents in rural areas can result in decreased success rate and also which are due to their life social, humans and religious.

Parents are able to play a very important role in the education of children with a positive return in terms of education. During the learning functional skills in children with disabilities they facilitate the many targets that children should achieve. They must be involved in a part of the education and training of their children. It’s for the success of children in various examinations. Well-informed parents allow quickly recognize the
first signs of an inability of their children. They can offer more news on the characteristics of evolution of their children. By Dr. Muhammad Naeem Mohs in The first meetings with parents conducted to discuss the results of the evaluation and the results also help develop the education management plan. To implement the management plan, parents' cooperation and participation is very helpful (Dr. Muhammad, 2011). Only parents can help teachers on a logical basis to teach children in order to have a good result.

4-The contributions and support of National and International organizations to the education system in Guinea

National and international organizations' missions in education: to design, create, and especially to support a system through government policy both at primary, secondary, vocational, technical, scientific research and higher education, civic education, documentation, and also non-formal education. They allow also provide and coordinate education and training of young people in the world to empower young people to participate in the socio-economic and cultural development worldwide. UNICEF9 Guinea plays a key role today in the education system Guinean through NGOs, especially in terms of girls' education, which has become a major scourge nationally and internationally, especially in poor countries. In Guinea by program evaluation for USAID /GUINEA BASIC EDUCATION PROGRAM PORTFOLIO, USAID/Guinea has invested 57 million dollars for the implementation of its strategy for the current planning cycle (1997-2006). At the beginning of this period, access to primary education had already begun to rapidly increase, but instruction was marked by low quality levels and a weak capacity for system-wide planning. In recent years, the country has experienced very important planning aid and donor coordination. As part of education reform the entire program of the system was implemented in 1989. Also during the first phase of the PASE1210 (1989-1994) a limited number of bilateral and multilateral donors (mainly USAID, French Cooperation, and the World Bank) provided a non-draft budget support provided for the restructuring of the country's primary education system. The guinea has a good number of donors fund from 1994 jusqu'a1999 or country had lost its credibility in the education system management for a long time (the beginning of the decade) and on the same

---

9 UNICEF is a global institution that had its mission since 1946 to help children after World War II, and of our continued to help countries in the educational field.

10 Partnership after school education (PASE) is an organization focuses on the child who promotes and supports quality after-school programs, especially those which serve as young people from underserved communities.
time donors had increased in Guinea (national and international) to the present, or there are still some factors addressed in the educational field.

**Remarks**

To well conducted to have dynamic schools, then that many studies were based on the effects. Physical factors with the aim to achieve results satisfactory are not up to our days (Hanushek 2003 and Krueger 2003). The problem of education in Africa is allied to the development of its privatization, in government of disqualification context, which generated unexpected process, see disaster.

Most important, concerning developed or industrialized in the educational fields, the methodology of solving problems are very simple while performing through the analysis of claims and the modes of institutional organization at the level of training in the educational setting. «Teachers are actors essential in the promotion of quality education, whether in schools or in more flexible community-based programs; they are lawyers and the catalysts for change. No education reform is likely to succeed without the active participation and involvement of teachers. » This was the perception of the world leaders who met in Dakar in 2000 to reassess the phase program of UNESCO, «education for all (EFA)\(^{11}\) ». It is important to deal with the problems of the teachers. The more hand writings in the educational field, highlight the incentives of their standard of living which is lie to their meager wages, relying on this categorization, can be based, for example, in the case of the Kenya, Glewwe, Ilias and Kremer 2003; in the case of Brésil Spretsma and Waldenberg 2007; to the Israel, for the IndeLavy 2002, 2004; Kingdon and Teal 2007, Muralidharan and Sundararaman 2006. The case of Punjab, Barrs (2005) which may be similar more ethnographic highlighting the impact of the effective decentralization to talk to teachers in order to read them on the quality of education that must be seen and this independently of the Statute and regulations; With that, the ideas are expressed for achieving this objective of good quality are still very divided. We have observed that much of the strikes caused by teachers especially within the country one of the first reasons was the problem of salary and then monitoring of the teacher especially on the verification of the effectiveness of the work of education (Banerjee and Duflo 2006, Duflo and Hanna 2005, Kremer and others (2005) in the case of the India). And especially some research is based mainly on the supported role during these moments of monitoring, by the parents of the

\(^{11}\) The movement of the Education for all (EFA) is a global commitment aimed at ensuring basic education of quality for all children, youth and adults.
students and local communities (Reinikka and Svensson 2004 for Uganda, Francken, Minten & al.2005 for Madagascar). Another way to research attempted to check to really identify the effectiveness of general training and also the educational programme of the Professor RivkinHanushek et Kain, 2005; for the United States, Aaronson, Barrow and Sander 2003, Angrist and Guryan 2004, Rockoff 2004; Clotfelter, Ladd and Vigdor 2006; Hanushek et others. 2005. For viewing of part of this writing mainly on countries developing the effect of effectiveness of teachers, (see Wößmann (2005) or Glewwe and Kremer (2006)). Under development, particularly through the impact of teachers, other studies have recognized, as a factor of efficiency of standardized tests (Bishop and Wößmann 2004), education hosted by local communities and the private school choice (King, Orazem and Wohlgemuth 1999, Angrist and others. 2002 and Angrist, Bettinger and Kremer 2004 for the Colombia).

Conclusion

In my comparison study, this analysis of variance showed better performance the level of students’ scores in physics in different regions. However, this method allows me to say that the maritime Guinea is organizing the educational field than the other three due to many educational factors. It is not surprising that the results were being like this. It was possible to use other methods.

As of today, the statistic is based on sampling (statistical inference) comparing to know the level of students. Have the advantage of easy implementation and transparency of results. The international community, which has pledged to support any credible plan of a country for achieving the Millennium Development Goals related to education, may be found in sector program a real reason to provide the necessary support to its realization.

Acknowledgments

This work was supported by School of Mathematic and statistics in Central China Normal University, Government of China for their generous financial assistance.

Fig7: image of a group of students with a unique degree in Guinea
References:
Seddoh, Komlavi Francisco. "Quality and Governance of Education"-Challenges Facing Developing Countries.
Dr. Muhammad Naeem Mohsin, Dr. Tariq Mahmood Khan, Dr. Ashiq Hussain Doger, Ahmed Sher Awan, Role of Parents in Training of Children with Intellectual Disability, International Journal of Humanities and Social Science, Vol. 1 No. 9 [Special Issue – July 2011.


