Abstract

This study was designed to access the impact of human capital development on teachers’ productivity in tertiary institutions in Kogi State. Three research questions and three hypotheses were stated to guide the study. Data for the study was collected by the use of structured questionnaire of closed ended using random sampling technique. The reliability of the questionnaire was tested using 50 responses from the lecturers with combert alpha method and the result of the analysis of 0.75 obtained showed that the questionnaire was reliable. Z statistics was used to test the hypotheses stated and the result of Z- calculated is greater than Z- critical. The result of the analysis made us to reject the entire null hypothesis and accept the alternatives that training and retraining of teachers in tertiary institutions has great impact on their productivity in tertiary institution in Kogi State. It was also discovered that some factors such as prompt payment of salaries and allowances, good working condition, job securities to mention but a few contributes to effectiveness of teacher productivity in tertiary institution setting in Kogi State. Also from the result of the analysis it was discovered that provision of teaching material has great effect on teaching and learning among tertiary institutions in Kogi State. Based on these, recommendations such as all academic institutions in the State and country in general should make sure that capital development project in education especially for tainting and retaining of staff in tertiary institutions are provided in yearly budget and implemented for efficiency, productivity and improved educational standard.
Keywords: Human capital, human resource, teachers’ productivity, teachers’ Motivation

Introduction

Human capital development in any economy has for long been regarded as the bane of economic growth and development. This is because the development of human beings brings about the development of the quality and productivity of labour which can be used to produce goods and services that results to growth and development in any economy. Also, human capital is regarded as the stock of knowledge, habits and social and personal attributes including creativity embodied in the ability to perform tasks so as to produce economic values (Aluko and Auko 2012). It is the collection of resources comprising knowledge, talents, skills, abilities, experience, training and wisdom possessed individually and collectively by individuals in the production processes. Human capital also refers to the set of skills and abilities which an employee employs in the organization to get work done ( Gyan 2011).

Agarwala, (2003) noted that human capital refers to those set of skills that an employee acquires on the job through training and experience. Similarly it is a collection of all the new ideas and knowledge which an employee acquires while working which helps to increase on-the-job efficiency and effectiveness. It is therefore imperative to note that in order for an employee to continuously become relevant in the work environment, he or she must continue to develop new methods of doing work. These new methods of doing work or expertise to work in an organization contribute to its growth and development that are referred to human resource or human capital (Gyan 2011). In this case, human capital is viewed as the aggregation of economic values of human activities within the economy with an attempt to capture the social, physical, and psychological complexity of human beings as they engaged in economic transaction (Gyan 2011). Many theories connected with investment in human capital to national development regards education as the pillar to productivity, growth, and innovation (Aluko and Auko 2012). Human capital is in this case is therefore regarded as the most important element of human endeavour. This is because, the development of human capital requires creating and cultivating conducive environment through which human beings can learn and apply such to create new ideas, acquire competence, skills, behaviours’ and attributes that can be used to enhance high production in the economy.
In the same vein, human capital according to (Rulof, Burger, Francis, and Teal, 2014) is considered as the totality of knowledge and skills by which productivity of worker is raised. It is the combination of different skills which are necessary for particular work and which ensures capacity building. Human capital in this case, has to be maintained throughout one’s life in order to improve skills, competence, and productivity in any economy. It is usually the effort of incorporating investment in education into the maintenance of economic values by the family, school and enterprises (Kleynhans and Labuschangne 2012).

Generally, human capital is the development of human beings in so many ways such as formal and informal education. Formal education is the type of education that can be acquired from primary, secondary and tertiary education. While informal education are attained through in-service training such as on-the-job training, off-the-job training, and membership of associations such as political, social, religious, and cultural groups. On-the-job training is the type of training that is conducted within ones’ work environment (Becker and Barry 1996, and Dike 2013). This type of training can strengthened human capital formation including organizational human capital and increase motivation, commitment and effort of workers in their work environment. It can also be achieve through different initiatives such as self innovations and creativity. On the other hand, off-the-job training is the type of training through which the employee is allowed to leave his/her work environment to an educational institution to receive education and training that will spur him or her to higher productivity (Collis and Montgomery 1996 and Goetz and Hu1996). Hence, human capital development has become part of an overall effort to achieve cost-effective and organizations’ performance. So many organizations need to understand human capital that would enhance employee satisfaction and improve performance. Although there is a broad assumption that human capital has positive effects on product performance the notion of performance for human capital remains largely untested. However from the organizational level, human capital plays an important role in the strategic planning especially on how to create competitive advantages in production processes.

Following the work of Iles et al.(1990) organization’s human capital has two dimensions which are values and uniqueness. In the context of effective management, the value focuses on increasing productivity in comparison with the associated costs while organizations of human capital add value if it
contributes to lower costs and provide increased performances (Bantel 1993). Furthermore, uniqueness on the other hand is improvement, effectiveness in production process which makes the organization to capitalize on opportunities that might arise in the production process to neutralizing any threats that can hinder their progress (Neo et al. 2003). In this case, teachers as the key actors in curriculum innovations are expected to possess the right values that make their uniqueness and competencies a motivational role in teaching and eliminate pitfall in educational programs. From the above scenario therefore, this paper examines the impact of human capital development and teachers effectiveness in tertiary institutions in Kogi State, Nigeria.

**Literature Review**

Human capital has a lot of attribute to economic development in any nation. This is because job performance and improvement depends on the training and retraining of human persons in any organization. Most developed and developing countries of the world lay emphases on human capital development as a way of accelerating economic growth by devoting necessary time, efforts and talents in production processes that increases economic condition of the society (Munmaannah and Lawrence 2008). The attention on human capital is mainly focused on two main attributes which include individuals and organizations. The individuals are expected to be committed and show great concern on the job environment by putting more effort to make sure that all the traits and talents are exhibited to achieving high level of productivity, while the organization on other hand is expected to motivate the workers through enhance earnings, job security, and other incentives that can lead to high productivity in the organization.

The concepts of human capital have been described by garavan et al. (2001) as intellectual virtues in education industry to consist of four keys attributes such as flexibility and adaptability in the work environment, enhancement of individual competencies through hard work, the development of organizational competencies in achieving the desired goals of organization and individual trainings and retraining to make themselves versatile and efficient in all aspect of production. They also maintained that these attributes in turn generate and add values to individual and organizational outcomes. Hence, the economic prosperity and functioning of any organization depends on its physical and human capital stocks. Physical capital has traditionally been seen as the factor
affecting the enhancement of human skills and talents that determines production. While human capital on the other hand, represents the investment on human person to acquire skills and knowledge that can lead to high human productivity and economic performance (Romele 2013).

Afrooz et.al(2011) opine that education and training raises the productivity of human capital through knowledge and skills acquisition will increased future income and lifetime earnings of the employees in any organisation. The theory according to their results leads to an increase in economic development which can be achieved and retained through education and productivity of workforce. Thus, the relationship between human capital and labour productivity has often been described as the major factor through which the amount of knowledge and skills acquired by each teacher can be applied in their work environment to enhance high productivity. In this case, education is therefore regarded as the bases of human capital development because it is through education that knowledge and skills for teaching are acquired and retained as bane for productivity. However, in all educational institutions in the country, teachers as the hub of training are expected to be motivated in such a way that their efforts are felt by all education industries in the country. Teaching according to romele (2013) is the impaction of knowledge and skills which have been accumulated through education and training to others in need of it. More so, human beings in the organization can raise their productivity by acquiring better education or training which in turn can be used to achieve high productivity. High productivity according to Agarwala, (2003) can be attained through adequate levels of earning, high job security, high education, and specific training such as on-the-job training, good working condition, safe and healthy working environment, and appropriate balance between work intensity, and greater employers participation and empowerment.

Research questioning

The following research questions are used to guide our investigation:

1. To what extent does human capital development create impact on teachers’ performance /productivity in tertiary institution in Kogi State?

2. What factors contribute to effectiveness of teachers in tertiary institution setting in Kogi State?
3. Does the provision of teaching material/teaching aids result in effective teaching and learning in tertiary institutions in Kogi State?

**Objective of the Study**

The following objectives guided the study.

1. To determine the extent to which human capital development can create an impact on teachers’ performance / productivity in tertiary in Kogi State institutions.
2. To examine the factors that contribute to effectiveness of teachers in tertiary institutions setting in Kogi State.
3. To find out whether the provision of teaching material / teaching aids results to effective teaching and learning among tertiary school pupils in Kogi State.

**Research hypothesis**

This study was guided by the following research hypothesis.

1. Human capital development creates no impact on teachers’ performance / productivity in tertiary institutions in Kogi State.
2. There is no significance difference between the factors that contribute to effectiveness of teachers in tertiary setting institution in Kogi State.
3. Provision of teaching material / teaching aids has no effort on teaching and learning among tertiary teachers in Kogi State.

**Methodology**

The population of the study comprises of 500 lecturers in Kogi State College of Education Ankpa and 600 lecturers in Kogi State University Ayingba making it a total of 1100 teachers. Data for the study was collected by the use of questionnaire, oral interview and observations. The questionnaire contained 15 structured items of open ended administered to the teachers in each of the institutions and retrieved at spot. The reliable test was conducted using 50 responses from the lecturers and tested with combert alpha method and the result of the analysis of 0.75 obtained shows that the questionnaire was reliable. Data collected were presented using tables, analyzed using nonparametric simple percentages while the z-test statistical technique was used in confirming stated hypotheses. A total of 1100 copies of the questionnaire
were administered, 100 were not returned while, and 1000 were used for the analysis.

**Analysis and Results**

**Research question 1:** to what extent does human capital development create impact on teachers’ performance/productivity in tertiary institutions in Kogi State?

Table 1. Response pattern of whether human capital development such as training and retraining creates impact on teachers’ performance / productivity in tertiary institutions in Kogi State?

<table>
<thead>
<tr>
<th>Provided Response</th>
<th>Number of Respondent</th>
<th>Percentage of Respondents(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Extent</td>
<td>655</td>
<td>65.5</td>
</tr>
<tr>
<td>Mild Extent</td>
<td>255</td>
<td>25.5</td>
</tr>
<tr>
<td>Low Extent</td>
<td>190</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: field survey 2016

Table 1 above indicates that a total of 655, that is (65.5%), of the respondents were of the opinion that human capital such as training and retraining to large extent creates impact on teachers’ performance / productivity in tertiary institutions in Kogi State. 255, that is (25.5%) of the respondents expressed mild extent opinion, while 190 or (19.0%) expressed poor opinion that training and retraining creates impact on teachers’ performance / productivity in tertiary institutions in Kogi State. From the result of the analysis it then implies that human capital such as training and retraining has great effect on teachers’ performance / productivity in tertiary institutions in Kogi State.

**Research Question 2:** What factors contribute to effectiveness of teacher in tertiary institution setting in Kogi State?
Table 2. Response pattern of whether factors such as prompt payment of salaries and allowances, good working condition, job securities etc, contributes to effectiveness of teacher in tertiary institution setting in Kogi State

<table>
<thead>
<tr>
<th>Provided Response</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Extent</td>
<td>756</td>
<td>75.5</td>
</tr>
<tr>
<td>Mild Extent</td>
<td>142</td>
<td>14.2</td>
</tr>
<tr>
<td>Low Extent</td>
<td>102</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>100</td>
</tr>
</tbody>
</table>

Source; field survey 2016

Table 2. above shows that 756 or (75.6%) of the respondents were of the opinion that factors such as prompt payment of salaries and allowances, good working condition, job securities etc, to great extent contributes to effectiveness of teacher in tertiary institution setting in Kogi State. 142 or 14.2% of the respondents had mild opinion, while 102 or (10.2%) expressed poor opinion that factors such as prompt securities etc, contributes to effectiveness of teacher in tertiary institution setting in Kogi State.

Research Question 3: Does the provision of teaching material / teaching aids result to effective teaching and learning in tertiary institutions in Kogi State?

Table 3. Response pattern of whether provision of teaching and learning in tertiary institutions in Kogi State?

<table>
<thead>
<tr>
<th>Provided Response</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Extent</td>
<td>600</td>
<td>60</td>
</tr>
<tr>
<td>Mild Extent</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Low Extent</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>100</td>
</tr>
</tbody>
</table>

Source; field survey 2016

From table 3 above discovered that 600 representing 60% of the respondents were of the opinion that provision of teaching material / teaching aids to great extent affect effective teaching and learning in tertiary institutions in Kogi State. 200 or 20% expressed poor opinion that provision of teaching material / tertiary institutions in Kogi State.
Test of hypothesis 1. Human capital development creates no impact on teachers’ performance / productivity in tertiary institutions in Kogi State.

\[ Z = \frac{P - P_0}{\sqrt{\frac{1}{N} - c}} \]

Were \( P \) is any raw score,

\( P_0 \) the mean of the raw score

And \( \sqrt{1/N} - c \)

Is the standard deviation of the raw score.

Hence, to test the hypothesis 1 above, the above formula is adopted.

From table 1 above, \( P=0.655, P_0=0.5, N=1000 \)

\[ Z = \frac{0.655 - 0.5}{\sqrt{\frac{1}{1000} - c}} = \frac{0.155}{\sqrt{1/997}} = 0.155 \approx 0.032 = 4.8 \]

From the calculation above it can be seen that \( Z \) calculated of 4.80 is greater than \( Z \) critical of 1.96 at 5% level of significance so, we reject the null hypothesis and accept the alternative that human capital development creates great impact on teachers’ performance / productivity in tertiary institutions in Kogi State.

Test of hypothesis 2. There is no significance difference between the factors that contributes to effectiveness of teachers in tertiary setting institution in Kogi State.

From table 2 above, \( P=0.756, P_0=0.5, N=900 \)

\[ Z = \frac{0.756 - 0.5}{\sqrt{\frac{1}{1000} - c}} = \frac{0.256}{\sqrt{1/997}} = 0.256 \approx 0.032 = 8.0 \]

As shown above, the \( Z \) calculated of 8.0 is greater than \( Z \) critical of 1.96 at 5% level of significance, so we reject the null hypothesis and accept the alternative that some factors such as prompt payment of salaries and allowances, good working condition, job securities etc, contributes to effectiveness of teacher in tertiary institution setting in Kogi State.
Test of hypothesis 3 Provision of teaching material / teaching aids has no effect on teaching and learning among tertiary school pupils in Kogi State?

Also, from table 3 above, \( P = 0.60, p_o = 0.5, N = 1000 \)

\[
Z = \frac{0.6 - 0.5}{\sqrt{\frac{1}{1000} - \frac{3}{3}}} = \frac{0.1}{\sqrt{\frac{1}{997}}} = \frac{0.1}{0.032} = 3.1
\]

From the above calculation Z calculated of 3.1 is greater than Z critical so we reject the null hypothesis and accept the alternative that provision of teaching material / teaching aids has greast effect on teaching and learning among tertiary school pupils in Kogi State

**Discussion of Results**

From the results of the findings, it was discovered that human resource development such as training and retraining of teachers in tertiary institutions in Kogi State has great effect on human capital development. This was tested using Z statistics with the information on table one above. The Z calculated of 4.8 greater than Z critical of 1.96 at 5% level of significance shows that we have to reject the null hypothesis and accept the alternative that human capital development creates great impact on teachers’ performance / productivity in tertiary institutions in Kogi State. Also, on the issue of whether or not some factors such as prompt payment of salaries and allowances, good working condition, job securities and others contribute to effectiveness of teachers in tertiary institution setting in Kogi State, the analysis was also conducted and it was discovered that some factors such as prompt payment of salaries and allowances, good working condition, job securities etc, contribute to effectiveness of teacher in tertiary institution setting in Kogi State. So, we reject the null hypothesis and accept the alternative.

Likewise, the information on teaching technique was also tested and it was discovered that provision of teaching material and teaching aids impact positivity on teaching and learning in tertiary institutions in Kogi State. In view of the above information, the following recommendations are made.

**Recommendations**

Human capital development has been discovered as the bane of educational development in the state. This is because through human resource
development educational advancement and productivity in the work environment is enhanced. In view of this therefore, the following recommendations are proffered.

- All academic institutions in Kogi State and in the country in general should make sure that capital development project in education industry especially for tainting and retaining of teachers in tertiary institutions are provided for in yearly budget and implemented for efficiency, productivity and improved educational standard. This is because training and retraining of staff make them to be more proactive and encourages them to do their best to improve their competency in their work environment. Also, adequate finance should be provided for the various higher institutions in the State. This will improve on the ability of the various schools to procure basic resources needed for developing quality manpower in the country.

- Job harassment among teachers in tertiary institution in the country should be discouraged and replaced with job securities. This is because when workers know that their jobs are secured, they will do the best to improve proficiency and professionalism in their work environment. Likewise, adequate rapport should be established between tertiary institution in the State and other institution in the country. This will assist in transfer of quality knowledge and information that will assist in the development of human resource that can meet with contemporary demand in the State.

- Prompt payment of salaries and allowances, good working condition and other conditions of service among teachers in tertiary institutions should be treated as a right but not privilege. If proficiency and professional competency is to be sustained and maintained in the tertiary institution setting in the country, remuneration of workers should be a priority of any government in power as this will foster educational enhancement and bring about educational development in the country.

- Professionalism in teaching should be encouraged and new teaching techniques provided for efficient teaching and learning in tertiary institutions in the State. New innovations and
techniques of teaching should be advocated and provided in tertiary institutions in the country. This will make teaching encouraging and learning enjoyable. Also, Government should ensure that appropriate laws and policies at each levels of education are created to provide an enabling environment for all tertiary institutions in the country and Kogi State in particular. These laws and policies will also help to improve the quality of human capital and enhance quality assurance in teaching and learning process.

**Conclusion**

Human capital development is very important in any economy because it enhances teachers’ productivity and spur teachers into proficient and academic competence in teaching and learning process. It is also believed that if teachers are motivated in their work environment, through prompt payment of salaries and allowance it will encourage work and increase the productivity in the work place. Furthermore, provision of new teaching technique is very essential if educational institutions in the country and Kogi State in particular is to be sustained and maintained. This is because new teaching materials enable teaching exhibit the spirit of competence in teaching and learning process.
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