Full Length Research Paper

Teacher competence as a tool for effective and sustainable human capital development in the federal capital territory: Implications for career guidance

B. O. Onyilo* and I. I. Shamo

Department of Counselling and Educational Psychology, Faculty of Education, University of Abuja, Nigeria.

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This study investigated teacher competence as a tool for effective and sustainable human capital development in selected Public Secondary Schools in the Federal Capital Territory (FCT), Abuja, Nigeria. Descriptive survey design was used for the study while simple random sampling technique was used to draw the sample for the study in two area councils in the FCT. The data generated was analysed using means scores, standard deviation, t-test and analysis of variance (ANOVA). The dependent variables for the study were knowledge impartation, teacher commitment to work and classroom management. The independent variables were gender factor, teacher qualification and teaching experience. Three research questions and three hypotheses guided the conduct of the research. The findings revealed a highly commendable level of teacher competence in service delivery. However, no significant relationship was found between the independent and dependent variables with significant values standing at 0.660, 0.389 and 0.345, respectively (P>0.05). The authors recommended that other psychological constructs such as self efficacy and emotional intelligence as independent variables should be used to gain more insight into teacher competence in the aforementioned ramifications. Regular career guidance should also be made as an integral part of capacity building for optimum and sustainable impact on human capital development.

Key words: Teacher Competence, human capital development and career guidance.

INTRODUCTION

Increasing students’ achievement and narrowing the achievement gap are challenges that the educational system continues to confront as it thrives to develop talents that will contribute to the nations economy. Some strategies to produce significant improvement in students’ learning are not entirely a mystery. A preponderance of research in recent years has indicated strong evidence that the best way to improve students’ academic achievement is by raising an effective teacher is every classroom, and an effective leader in every school (Leithwood et al., 2004). Therefore, the development of human capital – the talents, competencies and

*Corresponding author. E-mail: onylobenedict@gmail.com. Tel: 07038596486.

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knowledge of teachers and school leaders has drawn increasing attention in the education industry. As researchers and policy markers strive to better understand how to attract and retain highly skilled teachers and leaders to bridge the gap between the underperforming school system and the more affective systems of global competitors, investing in a thoughtful human capital development strategy is critical.

The need to adequately develop a nation’s human capital on a sustainable basis cannot be overemphasized in a nation’s economic and social progress. According to Iyoboyi and Muftau (2014), education is a key index of development. It is generally agreed by experts that education is a key driver of human capital development, the importance of which has been articulated in various documents including the Universal Declaration of Human Rights (1948), the International Covenant on Economic, social and Cultural Rights (1968) and the African charter on Human and Peoples’ Rights (1981).

Investing in human capital through the provision and sustenance of quality education is crucial to the development of society. Modern growth theories generally conclude that the accumulation of human capital is an important source of economic growth. Many studies have shown consistently positive relationship between the education of the workforce and labour productivity (Trostel, 2002). This is because better education tends to be associated with better employment opportunities, greater earnings and greater capacity for production. Education is thus considered an investment which equip individuals with knowledge, and skills that improve their chances of future earnings.

The imperatives of education as a medium of human capital development go beyond the acquisition of skills which prepare the individual for work, to one which instill the skills necessary for formulating, synthesizing and analyzing a matric of issues education promotes positive civic behaviours while cementing social cohesion which consequently consolidates the social capital of a nation. Because of the increasing integration of the world economy driven by technology, education has fast become critical in providing a society’s workforce to meet the stiff competition of the global community (Iyoboyi and Muftau, 2014).

Because a society’s human capital development is inextricably linked to its educational system, it is not surprising that more and better education often reflects in the degree of development. Consequently, the Nigerian educational system cannot be said to have produced the right cord for development. With dilapidated structures, poor remuneration system coupled with poor learning environment, incessant industrial strikes, incongruence between the academic curricular and industrial needs, the country has had to pay a huge penalty due to the educational crises, and consequently low human capacity building. Nigeria is generally reckoned as a country with vast human and natural resources, yet it is paradoxical that she is still bedeviled by a plethora of developmental challenges so much that more than fifty years after her political independence, she is in the development wilderness.

Distinguishing professional competence from professional qualification, Alade (2006) stated that professional competence has to do with how to teach whereas professional qualification refers to the teachers’ level of education and knowledge in the subject he teaches. Lee (2000) and Givens (2000) are among the authors who wrote extensively about professional competence, and how it relates with teaching effectiveness.

Awokoya (1999) and Elliot et al. (2000) wrote on professional competence in terms of methodology or instructional techniques of the teachers, classroom management and effective communication. Stressing the need and importance of professional competencies, Awokoya (1999) asserted that before going into the teaching profession, the teachers must have a period of internship like a doctor, a lawyer or an accountant during which he is groomed in the techniques of teaching under an experienced teacher. From the aforementioned, it is deducible that professional competence has to do with the teachers’ practical experience and expertise in the act of preparing, planning and presenting lessons in the classroom.

The American Federation of Teachers’ National Council on Measurement in Education and National Education Association (1990) enumerated seven standards for teacher competence in the educational assessment of their students. These include:

1. Choosing assessment methods appropriate for instructional decisions.
2. Developing assessment methods appropriate for instructional decisions.
3. Administering, scoring and interpreting the results of both externally produced and teacher produced assessment methods.
4. Using assessment results when making decisions about individual, students, planning, teaching, developing curriculum and making recommendations for school improvement.
5. Developing valid grading procedures which use pupils’ assessment;
6. Communicating assessment results to students, parents, other lay audience and other educators.
7. Recognizing unethical, illegal and otherwise inappropriate assessment methods and uses of assessment information.

Teachers are expected to have mastered these competencies to deliver appropriately. This study is therefore designed to assess teacher competence in
relation to human capital development using teachers in public secondary schools within the Federal Capital Territory (FCT).

Statement of the problem

The Nigerian educational system more than ever before, is bedeviled by a host of challenges ranging from infrastructural deficit, irregular policy framework, massive corruption to teacher disenchantment and incompetence. All these take a heavy toll on the products of the educational system.

Effective and sustainable human capital development can not be realized under a weak educational base. Hence teachers are the key drivers of knowledge and skill acquisition in the formal school system, their professional competence in human capital development is indispensable. There are strong indications that teacher competence in Nigeria is a far cry from the minimum benchmark. Many products of the nation’s educational system (including University graduates) are unemployable (Iyoboyi and Muftau, 2014).

These had impacted negatively on the national economy. The present economic recession in Nigeria calls for drastic action to rescue the education sector from total collapse. Human capital development is already in jeopardy. The essence of this study is to examine teacher competence in relation to sustainable human capital development. Selected public secondary school teachers in the Federal Capital Territory are the target respondents for the study.

Purpose of the study

This study is designed to achieve the following objectives:

1. To ascertain teacher efficiency in knowledge impartation in public secondary schools in the FCT.
2. To determine teacher commitment to work in public secondary schools in the FCT.
3. To assess teacher effectiveness in class management in public secondary schools in the FCT.

Research questions

The conduct of this study shall be guided by the following questions:

1. What is the situation with teacher efficiency with regard to knowledge impartation in public secondary schools in the FCT?
2. What is the situation with regard to teacher commitment to work in Public Secondary Schools in the FCT?
3. What is the situation with teacher effectiveness in classroom management in public secondary schools in the FCT?

Hypotheses

The following null hypotheses shall be tested at 0.05% level of significance:

H01: There is no significant difference between male and female teachers with regard to efficiency in knowledge impartation in Public Secondary Schools in the FCT.
H02: There is no significant relationship between educational qualification and teacher commitment to work in Public Secondary Schools in the FCT.
H03: There is no significant relationship between teaching experience and teacher effectiveness in classroom management in Public Secondary Schools in the FCT.

METHODOLOGY

Participants for this study were determined through simple random sampling technique. By so doing, the researchers ensured that each element in the teacher population had an equal chance of participating in the study. Two area councils (Bwari and Kwali) out of the six Area Councils in the FCT were selected for the study. Data for the study was generated through a self-structured instrument called teacher competence inventory (TCI).

A sample size of 162 teachers comprising 71 males and 91 females participated in the study. The questionnaire consisted of two sections: section A sought information on the demographic data of respondents such as gender, educational qualification and teaching experience. Section B solicited responses on three variables pertaining to teacher competence – knowledge impartation commitment to work and classroom management. The close-ended questionnaire required respondents to tick from a 4 point Likert scale of strongly agree (SA), agree (A) disagree (D) and strongly disagree (SD).

The instrument had a reliability coefficient of 0.78 through test-retest reliability procedure using Pearson Product moment correlation coefficient on a neutral population which was not part of the study. The validity of the instrument was ascertained by research experts in the department after series of corrections.

RESULTS

Research question 1: To what extent are teachers efficient in knowledge impartation in public secondary schools in the FCT?

Table 1 indicated that teachers are highly competent in knowledge impartation with an aggregate mean of 3.207. This is a commendable situation on the basis of the results obtained.

Research question 2: To what extent are teachers
Table 1. Teacher competence in knowledge impartation (n = 162).

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Mean</th>
<th>Std deviation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All teachers in this school have thorough knowledge of their subjects</td>
<td>2.94</td>
<td>0.985</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>I can boast of teachers in my school in terms of effective lesson delivery</td>
<td>3.42</td>
<td>0.729</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>My colleagues possess good communication skills in knowledge impartation</td>
<td>3.19</td>
<td>0.874</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Teachers in this school are highly productive in terms of students’ academic achievement</td>
<td>3.28</td>
<td>0.654</td>
<td>Accepted</td>
</tr>
<tr>
<td>-</td>
<td>Aggregate mean</td>
<td>3.207</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2. Teacher competence in terms of commitment to work.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Mean</th>
<th>Std deviation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All staff in this school have a sound sense of judgment pertaining to professional ethics</td>
<td>2.99</td>
<td>0.735</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>There is a highly commendable level of teacher innovation in this school with regard to the use of instructional materials in teaching</td>
<td>2.88</td>
<td>0.836</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>There is a high degree of proficiency in the compilation of students’ results by teachers in this school</td>
<td>3.45</td>
<td>0.650</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>All teachers in this school are efficient in the management of school records.</td>
<td>3.32</td>
<td>0.553</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>All teachers in this school have a high reputation for successful performance in extracurricular activities</td>
<td>2.87</td>
<td>0.702</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>All staff in this school relates well with colleagues</td>
<td>3.15</td>
<td>0.655</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Teachers in this school observe a high sense of professional commitment in terms of regularity and punctuality to work.</td>
<td>3.34</td>
<td>0.549</td>
<td>Accepted</td>
</tr>
<tr>
<td>8</td>
<td>Teachers in this school knows their strengths and are ready to receive guidance</td>
<td>3.15</td>
<td>0.830</td>
<td>Accepted</td>
</tr>
<tr>
<td>9</td>
<td>Teachers in this institution are up-to-date with latest trends in the theory and practice of education such as information and communication technology (ICT)</td>
<td>3.22</td>
<td>0.642</td>
<td>Accepted</td>
</tr>
<tr>
<td>10</td>
<td>Teachers in this school are efficient in the evaluation of students’ academic progress</td>
<td>2.95</td>
<td>0.836</td>
<td>Accepted</td>
</tr>
<tr>
<td>-</td>
<td>Aggregate mean</td>
<td>3.132</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Testing of hypotheses

**Hypothesis 1:** There is no significant difference between male and female teachers with regard to efficiency in knowledge impartation in public secondary schools in the FCT.

The result of the hypothesis shown in Table 4 shows that the F-Value of 0.194 is not significant at 0.660 level of significant (P>0.05). We therefore accept the null hypothesis that there is no significant difference between male and female teachers with regard to competence in knowledge impartation.

**Hypothesis 2:** There is no significant relationship between teaching experience and teacher commitment to work in public secondary schools in the FCT.

Table 5 indicates that the F-value of 1.011 is not significant at 0.389 level of significance (P>0.05). The null committed to work in public secondary schools in the FCT?

Table 2 reveals an appreciable level of teacher competence with regard to commitment to work. Standard deviation values show that deviation from the norm is quite negligible.

Research question 3: To What extent are teachers effective in classroom management in public secondary schools in the FCT?

Teacher competence in classroom management reveals that they are highly efficient in the identification and management of individual differences in the classroom. The other two dimensions of teacher competence also shows a commendable degree of efficiency in classroom management as revealed by the mean score of 3.44 and 2.95 respectively in Table 3.
Table 3. Teacher competence in classroom management.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Mean</th>
<th>Std deviation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teachers in this school are noted for identification and management of individual differences in the classroom</td>
<td>3.32</td>
<td>0.674</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Our staff without any exception understand the psychology of human growth and development in relation to teaching and learning</td>
<td>3.44</td>
<td>0.600</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>All teachers in this school demonstrates effective class control to facilitate learning</td>
<td>2.95</td>
<td>0.836</td>
<td>Accepted</td>
</tr>
<tr>
<td>-</td>
<td>Aggregate mean</td>
<td>3.236</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4. T-test result showing gender difference in teacher competence with regard to knowledge impartation.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t-value</th>
<th>f-value</th>
<th>P value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>71</td>
<td>3.1303</td>
<td>0.565</td>
<td>160</td>
<td>-1.602</td>
<td>0.194</td>
<td>0.660</td>
<td>Not sig.</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>3.2747</td>
<td>0.572</td>
<td>160</td>
<td>1.602</td>
<td>0.194</td>
<td>0.660</td>
<td>Not sig.</td>
</tr>
</tbody>
</table>

Table 5. Relationship between teaching experience and teacher commitment to work (ANOVA).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.523</td>
<td>3</td>
<td>0.174</td>
<td>1.011</td>
<td>0.389</td>
</tr>
<tr>
<td>Within groups</td>
<td>27.242</td>
<td>158</td>
<td>0.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27.765</td>
<td>161</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis is hereby upheld to the effect that there is no significant relationship between teaching experience and teacher commitment to work in public secondary schools in the FCT.

Hypothesis 3: There is no significant relationship between teaching experience and teacher effectiveness in classroom management.

In Table 6, there is no significant relationship between the two variables such that F-value of 1.115 is not significant at 0.345 level of significance (P>0.05), the null hypothesis is therefore accepted.

DISCUSSION

The findings of the study reveal that teachers in public secondary schools in the Federal Capital Territory demonstrate exemplary degree of competence in knowledge impartation, commitment to work and classroom management. All the items on the instrument designed to measure teacher commitment received overwhelming affirmation of competence.

The result reveals that teachers in the FCT have thorough knowledge of their subjects (2.94), effective lesson delivery (3.42), good communication skills (3.19) students’, academic achievement (3.28). Teacher competence with regard to commitment to work also appeared quite glaring with an impressive mean value of 3.132. It is also worthy of note that deviations from the established norm is quite negligible.

A similar scenario is equally observed with respect to classroom management, identification and management of individual differences in the classroom which is indispensable for effective teaching recorded a mean score value of 3.32, knowledge of the psychology of human growth and development in teaching and learning (3.44) as well as effective class control (2.95). In a nutshell, going by the result of the survey, we can categorically conclude without any fear of contradiction that teachers in public secondary schools in the FCT demonstrate a responsibly high degree of competence in human resource development.

The results upheld all the three null hypotheses formulated for the study. The first null hypothesis which sought to determine significant difference between male and female teachers with regard to efficiency in knowledge impartation was upheld. Proficiency in knowledge impartation is very cardinal in education without which learning cannot take place. The educational system (especially in Nigeria) is largely cognitive in
nature and cognitive knowledge, in most cases, is fundamental to the acquisition of skills, values and attitudes.

In the same vein, no significant relationship was found between educational qualification and teacher commitment to work. This finding is corroborated by that of Ambe and Agbor (2014) who discovered that teaching experience and the implementation of environmental education curriculum in Cross Rivers State had no significant relationship. This finding is in conformity with the view of Ashton (2000) who noted that mere experience is not enough in the classroom. The author pointed out that effective teaching fails when a teacher fails to learn no matter how long he must have taught.

In other words, a teacher might hold professional qualifications, but if he fails to learn what he teaches, and if he fails to abreast himself of current developments in his chosen field of study, then the experience serves no purpose. The last hypothesis equally revealed no significant relationship between teaching experience and teacher effectiveness in classroom management. Effective classroom management is key to effective teaching and learning.

Conclusion

Secondary school teachers in public secondary schools in the FCT demonstrate a commendable level of competence in human capital development. This competence is manifest in specific areas such as knowledge impartation, commitment to work and classroom management. Gender factor, educational qualification and teaching experience had no significant bearing on teacher competence in the aforementioned dimensions.

RECOMMENDATIONS

Hence gender factor, teacher qualification and teaching experience had no significant bearing on teacher competence, psychological constructs such as emotional intelligence and self efficacy as they relate with teacher competence should be examined. This will enable stakeholders, especially career counselors and counselling psychologists to nurture those traits that engender teacher competence in all its ramifications. Career guidance should be made as an integral part of capacity building for teachers. This will keep them abreast with global best practices. Teachers in this institution are up to date with latest trends in the theory, and practice of education such as information and communication technology (ICT).

CONFLICT OF INTEREST

The authors have not declared any conflict of interests.

REFERENCES