Teachers Understanding of Early Childhood Curriculum: Are Trained Teachers Better?

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Abstract
This study addressed early childhood educators; teachers’ understanding and roles in curriculum development and implementation in early childhood programs. In all, 97 teachers from three districts in northern Ghana participated in the study. Two research questions guided the study. The data generated were subjected to descriptive statistics and analysis of variance. The study found among others, that trained teachers were neutral on both questions, while untrained teachers disagreed. This perception was consistent with the associated literature. The findings revealed the need for a total re-orientation of the educational program for teachers and a call for partnership between teachers and curriculum developers in the curriculum process.

Keywords: Early Childhood Education, Ghana, West Gonja, Curriculum.

Introduction
In an attempt to consolidate its leading position in providing access to kindergarten (KG) education and to further promote improvements in the high quality of education in Ghana, the Government of Ghana over the years have taken strides in reforming the educational sector. Among such reforms as enshrined in the 1992 constitution of Ghana, is the provision of free, compulsory, Universal Basic Education which has been in place since 1998. In furtherance of this noble objective, in 2003, the government of Ghana, initiated sweeping reforms manifesting in what is referred to as Education Strategic Plan (ESP) for the period 2003-2015. This plan was set within the framework of the Education for All Goals, the Millennium Development Goals, the Ghana Poverty Reduction Strategy, and the President’s Committee on the review of education system. Posited within this framework is the role of early childhood education as a foundational tool in national development.

In Ghana, government programs at the KG level aims to provide an educational experience at a level of high quality which in itself should propel children’s developmental trajectory meaningfully. In this regard, policy measures aimed at establishing standards such as teacher qualification and expertise in teaching, especially at the early childhood level has received great attention. Teacher qualification and background in what is taught and how is taught; curriculum undoubtedly has been identified to have a direct correlation with pupils’ performances (Brophy, 1986). Recent studies have revealed that there is dramatic evidence of the influence of the classroom teacher on student learning (Tucker, & Stronge, 2005; Wenglinsky, 2002). In fact, it is argued that, the single most important determinant of quality in early childhood education is the interaction between pupils and the teacher. And this can be possible through adequate training on the part of the teacher, and of course small class sizes.

Of late, studies on teaching and learning have as expected, focused attention on the relationship between teacher background and quality teaching. Data from such studies have revealed that there is a dramatic influence of the classroom teacher on student teaching (Haycock, 1998) and that, this obviously is influenced by the repertoire of knowledge that the teacher possesses in the specific subject area (Darling – Hammond & Youngs, 2002). However interestingly and quiet unfortunately, when it comes to early childhood education, there is this quick and incorrect conclusion that anybody can effectively teach at that level (Essa, 2007). It is on this note that this paper attempts to address an important topic; the extent to which early childhood educators; teachers are knowledgeable about, and involved in the development of school curriculum in an important but neglected region; Ghana with expanding early childhood potential. The paper specifically elicits the opinions of two groups of early childhood educators; trained and untrained, in one of the most deprived communities in Ghana; northern region, about their knowledge of the early childhood curriculum and the extent to which they are involved in its development and implementation. During this process, early childhood educators are probed to respond to a number of questions pertaining to their understanding of curriculum content and most importantly how that affects children’s learning.

Undoubtedly, school curriculum is meaningless and lacks relevance without implementation, which strictly speaking is through teaching. Teaching is always about something so it cannot escape curriculum, and teaching practices in themselves imply curricular assumptions and consequences. It will be extremely difficult to avoid stumbling on curriculum when one is trying to understand teaching, or engage in teaching when one is deliberating on curriculum. It is on this premise that this study attempts to unveil the perspectives and
understandings of the early childhood educator (teacher) in Ghanaian school curriculum. Specifically, the study sought to assess the understanding of the early childhood educator about school curriculum with regards to its development, implementation, and restructuring. Also, the study aimed at determining if there are any significant differences between trained and untrained educators in their understanding of early childhood curriculum, and their respective roles in the curriculum process. Additionally, it aimed at advancing suggestions and recommendations that will help to reorient the early childhood educator about not just the school curriculum but his/her place in the curriculum process.

In addressing the above aims, the study sought to ask the below questions:
1. How do early childhood educators rate themselves of their understanding of school curriculum?
2. What are early childhood educators’ perceptions of their role in school curriculum?

Methodology
This was a descriptive research of the survey type design which used a sample of 97 early childhood educators selected from three districts; East Gonja, West Gonja, and Central Gonja; all in the Northern region of Ghana. Under the guiding principle of a pre-approved survey instrument, participants voluntarily agreed to respond to a list of questions in the form of a questionnaire. Prior to contacting early childhood educator’s in public schools within the three districts, copies of introductory letters were sent to the three District Directors in the towns of Damongo, Salaga, and Buipe, asking permission to undertake this study. After responses were received letters were sent to heads of private and public early childhood centers. Two weeks after the letters were sent the researcher proceeded to distribute questions to heads of schools who agreed to participate in the study. In all 97 early childhood educators comprising 29 untrained and 68 trained educators responded to the questionnaire.

The questionnaire comprising three sections was self-administered. Section ‘A’ consisted of ten (10) questions which elicited personal background information such as whether the educator was trained or untrained, number of years of teaching, the level or class which the educator teaches; i.e., crèche, nursery, or kindergarten, sex, age, and others. Section ‘B’ was made up of closed and open-ended questions used to rate educators understanding of school curriculum. Section ‘B’ consisted of ten (10) questions. Section ‘C’ was also made up of closed and open-ended questions aimed at obtaining educators’ perspective in their roles in curriculum implementation and restructuring. Section C also consisted of ten (10) questions.

For sections ‘B’ and ‘C’, a Likert scale asked participants to respond to a series of statements whether they strongly agree (SA), agree (A), neutral (N), disagree (D), or strongly disagree (DS). Each response was associated with a point value, and an individual’s score was determined by summing the point’s value of each statement and striking an average. This was represented as follows; SA=5, A=4, N=3, D=2, SD=1. Data collections also included a yes or no answer. Data analysis was done using descriptive statistics, mean plot, and analysis of variance to determine if any significant differences existed between the two groups (trained and untrained early childhood educators).

Findings
Findings of the study were presented according to the research questions. Significance level for any existing differences was pegged at 0.05. On the question of how educators rate themselves of their understanding of school curriculum, results revealed a less positive rating by both trained and untrained educators. Table 1a below illustrates this point.

Table 1a: Descriptive Statistics

<table>
<thead>
<tr>
<th>Status of respondent</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained</td>
<td>68</td>
<td>3.3382</td>
<td>1.0454</td>
<td>0.1268</td>
</tr>
<tr>
<td>Untrained</td>
<td>29</td>
<td>2.6207</td>
<td>1.1153</td>
<td>0.2071</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>3.1237</td>
<td>1.1111</td>
<td>0.1128</td>
</tr>
</tbody>
</table>

Table 1a above shows a mean rating of 3.3382 for trained educators and 2.6207 for untrained educators. This is an indication that, trained educators rated themselves as moderate or average on their understanding of early childhood curriculum. Responses of untrained educators as revealed in table 1a above falls slightly above disagree but below neutral. Clearly, there exist differences in the ratings of trained and untrained educators on the question of their understanding of early childhood curriculum. Such differences are clearly represented in the mean plot below:
Descriptive statistics in Table 1a show only a slight difference in the mean average of educators’ ratings of their understanding of early childhood curriculum; however, when this is represented graphically as shown in Figure 1a, it reveals a more accurate difference. This is more revealing through ANOVA as represented in Table 1b:

Table 1b: ANOVA

<table>
<thead>
<tr>
<th>Source of Variance</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>10.467</td>
<td>1</td>
<td>10.467</td>
<td>9.203</td>
<td>0.003</td>
</tr>
<tr>
<td>Within groups</td>
<td>108.048</td>
<td>95</td>
<td>1.137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.515</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 1b, an identification of the source of variance as between – groups, within – groups, and the total is provided. The respective sum of squares for each source is also provided. Degrees of freedom as well as the mean sum of squares of between – groups, within – groups are also provided. Finally, the obtained value (F = 9.203) and the associated significance level are all provided. Hence, at a significance level of P<.05, SPSS output as represented in Table 1b provides the exact probability of the outcome, .003, which is much accurate and more unlikely than .05. Based on this, it will be appropriate to arrive at the conclusion that, there is a significant difference in the means of trained and untrained educators in their ratings of their understanding of early childhood curriculum. This is represented as: F (1, 95) = 9.203, P<.05?

On the question of educators’ ratings of their role in early childhood curriculum, the responses were not very different from research question 1. Table 2a represents the responses of participants.

Table 2a: Descriptive statistics

<table>
<thead>
<tr>
<th>Status of respondent</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained</td>
<td>68</td>
<td>3.3088</td>
<td>0.9020</td>
<td>0.1094</td>
</tr>
<tr>
<td>Untrained</td>
<td>29</td>
<td>2.4148</td>
<td>1.1186</td>
<td>0.2077</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>3.0412</td>
<td>1.0500</td>
<td>0.1066</td>
</tr>
</tbody>
</table>

The mean responses on the question of educators’ role in early childhood curriculum is as follows; trained educators = 3. 3088, untrained educators = 2.4148. Based on the Likert scale, it will be accurate to conclude that responses by the two groups were less positive or at best neutral for trained educators and disagree for untrained educators. Results as provided in Table 2a clearly show differences in the responses. This is clearly represented in Figure 2a.
Responses provided in table 2a reveals not much difference between the responses of the two groups of participants. However, as revealed in the mean plot (Figure 2a), differences between the two groups on the question of their role in school curriculum is clear. Such differences are more revealing in table 2b.

### Table 2b: ANOVA

<table>
<thead>
<tr>
<th>Teachers role in school curriculum</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>16.286</td>
<td>1</td>
<td>16.286</td>
<td>17.277</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>89.545</td>
<td>95</td>
<td>0.943</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.835</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANOVA as represented in table 2b provides the source of variance between – groups, within – groups and the total. The respective sum of squares, as well as the degrees of freedom and the mean sum of squares between – groups, and within groups are also provided. Finally, the obtained value (F = 17.277) and the associated level of significance is also provided. At a significance level of P<.05, SPSS output as represented in table 2a provides the exact probability of the outcome, 0.000. Hence, it will not be wrong to conclude that, there is a significant difference between the means of the two groups of participants on the question of their perception towards their roles in school curriculum. This difference is represented as: F (1, 95) = 17.277, P < .05?

### Discussion

This study looked at early childhood educators’ ratings of their understanding of early childhood curriculum, as well as their perceptions of their roles in its implementation and restructuring. In all, 97 educators comprising 68 trained and 29 untrained educators from three selected districts; East Gonja, West Gonja, and Central Gonja volunteered to participate in this study. In summary, three major findings were revealed in this study.

- First, trained educators’ rating of their understanding of early childhood curriculum, and roles in its implementation and restructuring is higher than un-trained educators.
- Secondly, there were significant differences between the two set of educators on the two research questions.
- Thirdly, among the reasons attributed to why early childhood educators perceived themselves as lacking understanding of early childhood curriculum, implementation and restructuring is as a result of their non-involvement in the curriculum development process.

Responses by trained educators on both questions; understanding of early childhood curriculum, and roles in its implementation and restructuring based on the Likert scale could be described as neutral, whiles that of
untrained educators could be described as disagree. On the whole, these responses are expected since trained educators should have a higher level of understanding of early childhood curriculum than untrained educators, due to their specialized training.

Notwithstanding these differences, results of the study go to validate concerns raised in the associated literature; teachers are not well versed in the philosophical, as well as psychological, sociological and methodological questions pertaining to specific curriculums which they are to operate (Herron, 1971), and personnel in early childhood education are no exception.

There could be a whole lot of reasons assigned to this fundamental problem, but the major reason as argued by Connelly & Elbaz (1980) is the lack of education on the part of teachers when it comes to school curriculum. This assertion is evidenced in a 2008 UNESCO report which noted that the ratio of KG pupils to trained teachers in Ghana was 155: 1, instead of the projected 25:1 (The EFA Global Monitoring Report (GMR), UNESCO 2008). In short, limited or lack of education on the part of early childhood educators, as well as curriculum outsourcing as argued by Doyle (1992) are among the many factors contributing to this challenge.

This point was revealed in this study.

To address the above fundamental problem, this study recommends that, a major rebalancing of teaching as a profession and that of curriculum development and implementation is needed. By this, curriculum concepts, ideas, and training programs need to be developed with emphasis on the place of the teacher in the curriculum process (Schubert, 1986). Such programs, it must be stressed, should recognize that the teacher and others closely connected with teaching ultimately reinterpret and adopt the stipulations of the school curriculum. Schulman (1988) cited in Jatto (1994) argues that, as educators we cannot pretend that deficiencies in student’s learning are unrelated to deficiencies in teachers knowledge base. Hence, the single most important antidote is to get the early childhood educator involved, and understand what shapes the learning process; the curriculum.

**Conclusion and Recommendations**

Considering the place and importance of school curriculum in the total educational process, this study sought to find out the role and understanding of early childhood educators in this important process. In all, the study has successfully demonstrated that, there is a lack of understanding on the part of early hood educators with regards to curriculum development and restructuring. While it will be difficult to speculate on the fraction of educators who fall within this bracket, this preliminary study provides scope for more explicit exploration of factors that have contributed to this shortfall. One of the factors as revealed in this study is the disconnect that exists between curriculum development and its implementation. This study undoubtedly, has succeeded in putting forward that, limited involvement and input on the part of early child hood educators in the curriculum process is a major factor.

Consequently, this study calls for a partnership between curriculum developers and early childhood educators, who are the direct implementers of what is developed. Advocating for such a connection, Putnam & Borko (2000) argue that, curriculum materials should situate teacher learning in the context of classrooms by being an integral part of teachers work. According to the authors, curriculum materials can be regarded as social artifacts initially created by curriculum designers and later used by teachers. Undoubtedly, curriculum design, planning, implementation, and development may definitely require expertise of some sort. These, the early childhood educator may be lacking, however, when a conscious and deliberate attempt is made to involve the early childhood educator in the process, teaching and learning becomes effective. Therefore, apart from involving early childhood educators in the curriculum development process as recommended by this study, it is also important for a further study to be done into early childhood educator’s understanding and appreciation of how children learn and the extent to which school curriculum at the early childhood level in Ghana is child-centered in practice.

**References**


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