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EVALUATION OF INSTRUCTIONAL DELIVERY IN GIFTED EDUCATION PROGRAMME IN NIGERIA

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ABSTRACT

This study is a case study evaluation of the quality of the instructional delivery in the federal government college(centre for the gifted and talented) Suleja, Nigeria. Since 26 years of establishment of the centre, the aim of setting up the centre has been considered dwindling. This is why an independent assessment of the centre becomes a serious concern to researchers in order to review the instructional programme of the centre. The Discrepancy Evaluation Model (DEM) and the Process Evaluation were adopted to assess the teachers-students ratio, effectiveness of teachers' lesson delivery, quality of students' assessment as well as quality of curriculum adaptation. The study assessed 56 teachersin the centre as at the time of evaluation in 2017. A validated observation rating scale titled Instructional Delivery Assessment Scale (IDAS) was used for data collection. The reliability of the instrument obtained from inter-rater procedure to produced concordance correlation coefficient of.79 for Classroom Instructional Delivery Observation sub-scale (CIDO) and .77 for Curriculum Delivery Observation Rating sub-Scale (CDOR). The findings from the study inferred that the teacher-students ratio is inappropriate, lesson delivery does not measure up to expected standard, the students assessment is not qualitative enough, curriculum adaptation is fairly good but not well implemented in the interest of the gifted students. It was therefore recommended among others that the federal government in collaboration with ministry of education should conduct a comprehensive programme evaluation and needs assessment of the centre.

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INTRODUCTION

One major objective of special needs education is to help every student develop his/her potential to the fullest (Diemann, 2014). Therefore, every Nigerian child needs quality instructional delivery in order to develop holistically, especially the development of their talents, innate ability or gift. For this reason, all students and particularly the gifted students deserve the opportunities to learn, grow, unfold potentials, and be challenged to strive for academic, vocational and moral excellence at all levels of education for self and society gains. Hence, education for the gifted and talented in Nigeria was conceived to engage gifted students fully in their learning process through provisions of varieties of experiences, facilities, adapted curriculum, specialized teaching pedagogy, qualify and competent teachers/facilitators, serene environment and opportunities for them to optimize their potentials.

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So, there is no amount of effort or attention given to the education of gifted and talented students in Nigeria that is too much as it has been conceived as an investment that will definitely be rewarding and beneficial to the country in the nearest future (Dada &Fagbemi, 2015). The aim of floating the gifted and talented special education programme in the Federal Government Academy, (Centre for the Gifted and Talented), in SulejaNiger State, Nigeria as expressed in the national policy on education is to develop the potential of children, youth and adult who have special gift and talent at their own pace in the interest of the nation's economic and technological advancement (FRN, 2015). Some experts in the field of gifted education have made several inputs into the school for improvement. Others have visited with dwindling reports on the progress of the school. It is however very disheartening to see the nation in her present position of under development in the light of the over reliance of the nation's economic and technological consumption onforeign products. The over reliance of the foreign experts for virtually every area of need in technical skill and the underdevelopment of the nation's economy is highly disturbing. The society seems not to even

believe in the existence of the education for the gifted as there is doubt of any significant contribution made by the programme in the past 26years of existence. It is therefore very crucial to ask the question; how is the education of the gifted faring in the light of the various challenges facing education industry in Nigeria. This question can only be answered by a critical evaluation of the gifted programme.

The overall goal of educational programmes for gifted and talented students is to ensure fullest possible potential development of every gifted student. In the broadest terms the educational goals for the youngsters must be qualitatively and quantitatively different. Gifted student needs to develop both content knowledge and application abilities, and use that knowledge productively for solving societal problem effectively and efficiently. This, therefore behooves the educational programme for gifted to deliver quality instruction to the gifted students through effective classroom organization, qualify and competent teachers, and quality teaching. The teachers are expected to make sure that the gifted students learn the content differently, through advanced context exposure and highly resourceful materials, compacting curriculum, conference learning, inter disciplinary learning atmosphere, self-pacing, and working with mentors (Dada, 2015).

Wine (2001) advocated that the instructional delivery for the gifted should take into consideration the size of the students in the classroom, the teacher-student ratio, the learners' interest, ability level, instructional objectives, and the societal value. Putting this consideration in mind will help greatly to realize the potential of the gifted child for the societal gain. Excellent teachers must understand also that gifted student required academic challenges through qualitative curriculum adaptation in the classroom. Challenge is one of the key components of effective curriculum and instruction. Brain research indicates that learning takes place when students' abilities and interests are stimulated by the appropriate level of challenge (Caine & Caine, 1991). This often leads to problems for gifted students: If the content and tasks that have been deemed suitable for their grade level are too easy, they will not be engaged, and as a result, they will not be learning. Brain research provides a physical explanation for students' failure to learn. When tasks are not sufficiently challenging, the brain does not release enough of the chemicals needed for learning: dopamine, noradrenalin, serotonin, and other neurochemicals (Schultz, Dayan, & Montague, 1997, cited in Tomlinson &Kalbfleich, 1998). To effectively implement instructional delivery in educational programmes for gifted and talented students, schools need to consider issues related to the development of adapted curriculum. Curriculum should be comprehensive, taking into account the cognitive, social, cultural, and emotional needs of gifted and talented students. Developing a curriculum structure of this nature ensures the longevity of gifted programmes by putting on paper the school's intentions for its gifted and talented students. When developed in conjunction with *The New Zealand Curriculum*, it also eliminates the fragmented nature of these programmes. Planning curriculum also means that gifted and talented students' needs aren't accidentally met but are consciously addressed.

It is very clear that curriculum differentiation for gifted and talented students must consist of qualitative, rather than quantitative changes. These adjustments to their education should incorporate well-thought-out, meaningful learning experiences that capitalise on students' strengths and interests. Within qualitative differentiation for gifted and talented students, three primary areas of differentiation must be considered:

- **Content:** What is taught or learned — the concepts, information, ideas, and facts within the curriculum.
- **Process:** How the content is taught or learned — how new material is presented, what activities students are involved in, and what teaching methods are used.
- **Product:** How learning is evidenced by gifted and talented students-tangible or intangible results of learning, "real" solutions to "real" problems.

Howeverincorporating this planning and continuity within the teaching responsibilities in the classroom for gifted learners has never been easy (Rimm, 2001). This therefore behooves the teachers to rise to strategizing and devising various instructional techniques and strategies for accommodating gifted and talented learners in the classroom.Curriculum content and delivery is another important area of the gifted education that cannot be over emphasized. The blue print recommends that the curricula content for the gifted programme should include all existing subjects and disciplines as stipulated by the National Policy on Education. Many professionals like Nwazuoke (2000), Fakolade (2004), Kesner (2005), Dada and Dada (2014) to mention few have consistently posit that the ordinary (regular) curricula will make no significant impact in the gifted education programme. Therefore the curriculum should apart from including all subject areas, talent and gift to cover the varied interest of the gifted children; it should also be modified to suit the ability and pace at which the students are capable. It is against this backdrop that this study evaluates quality of instructional delivery in gifted education programme of the Federal Government Academy (Centre for Gifted and Talented) Suleja-Nigeria. The four specific variables under investigation include quality of students' class enrolment, classroom lesson delivery, students' assessment process and quality of curriculum adaptation.

Research questions: Two research questions were asked and answered in the light of the evaluation of the quality of instructional delivery in gifted education programme in Nigeria. They are:

1. What is the quality of instructional delivery in the gifted education programmein terms of student number per class, teachers' lesson delivery and teachers' assessment process at Federal Government Academy(Centre for Gifted and Talented) Suleja-Nigeria?
2. How qualitative is the curriculum adaptation in the gifted education programme at Federal Government Academy, (Centre for Gifted and Talented) Suleja-Nigeria?

MATERIALS AND METHODS

The study is a case study that adoptsDiscrepancy Evaluation Model (DEM) developed by Malcolm Provus (1971) and the Process Evaluationcomponent of The Context, Input, Process, Product (CIPP) evaluation model by Daniel Stufflebeam (1971). The direct classroom observation approachwas usedin

a pure and unbiased mannerto elicit information about the standard of theinstructional delivery in the programme. Since the study is a single case study, the school selection is purposive due to the objective of the study and the characteristics under investigation. There are 56 teachers and 753 students that form the response population in the study. Observed classes were by convenience sampling while secondary data of the school records was used to get the enrolment of the students and staff. A researchers-constructed instrument titled Instructional Delivery Assessment Scale (IDAS) with two sub-scales was used for data collection. Three experts from the field of gifted education, educational measurement and curriculum and instruction validated the instrument. The reliability of the instrument is obtained from an inter-rater procedure for reliability estimate. The trial rating was administered in a unity secondary school owned by the federal government. The scores were correlated using the concordance correlation coefficient to estimate the reliability. The concordance correlation coefficient was used to evaluate the consistence of two observers on the same observation or for inter-rater reliability. The correlation coefficient gave .79 for Classroom Instructional Delivery Observation Scale (CIDOS) and .77 for Curriculum Delivery Observation Rating Scale (CDOS)**.**The part A of the instrument is to elicit secondary data from the school record. Permissionwasgiven by the principal of the school in response to our request. This permission was given for two weeks to carry out the investigation. The researcher were engaged in the observation and rating of classroom delivery. The essence of the team observation approach is for a collaborative judgement of the reports. Such collaborative judgement helped to reduce judgement bias and increase reliability and validity of the judgment.Data collected was be analysed by percentages, simple charts, mean, and standard deviation.

assessment process at Federal Government Academy (Centre for Gifted and Talented) Suleja-Nigeria?

Data was collected majorly on three sub-variables (quality of students' class enrolment, teachers' lesson delivery and students' assessment process) with respect to research question 1. Table 2 presented the result of the data analysis with respect to the evaluation of the quality of students' class enrolment. The table indicated the class enrolment with their various streams. The standard required in the blue-print for gifted education is that class size should be fifteen (15) per class. This class enrolment standard was justified on the diversity of the interest and potentials of the spectrum of students. Comparing the average number of students per class in the 6th column of the table it is found that instructional delivery in all the classes are not appropriate in terms of student number per class. Therefore the quality of instructional delivery was considered poor with respect to average number of student per class as it is against the expected standard required. Table 2 provides the result of the evaluation of teachers' lesson delivery of a sample 56 teachers in the school. An item by item analysis of the data collected was done to show how very good the teachers' are in the classroom delivery of their lessons. A teacher observation scale was used for the data collection. The result of the data collected with respect to the teachers' lesson delivery is better illustrated on the simple bar chart for easy understanding. Considering the table and chart critically, out of the 56 teachers observed in the classroom, it was found that on each item of assessment, majority of the teachers are only fair in their lesson delivery (learners' entry behaviour= 32.1%, motivational techniques= 58.9%, students involvement in the lesson= 48.2%, provision for individual differences= 48.2%, and Provision for transfer of learning= 66.1%).

Table 1. Appropriateness of students' class enrolment

Class	Number of Boys	Number of Girls	Total number of students	Number of Streams	Number of Students /Class (Policy standard=15)	Remarks
JSS 1	79	51	130	5	26	Inappropriate
JSS 2	96	74	170	5	34	Inappropriate
JSS 3	60	63	123	4	31	Inappropriate
SSS 1	72	59	131	5	26	Inappropriate
SSS 2	43	31	74	3	25	Inappropriate
SSS 3	71	55	126	3	42	Inappropriate
Total	420	333	753	3	27	Inappropriate

Table 2. Descriptive analysis of teachers' effectiveness in classroom lesson delivery

		Very Good		Good		Fair		Poor		Total	
		N	%	N	%	N	%	N	%	N	%
1	Determination of learners' entry behaviour (ability & interest)	5	8.9	17	30.4	18	32.1	16	28.6	56	100
2	Use of good motivational techniques	-	0.0	15	26.8	33	58.9	8	14.3	56	100
3	Involves students in the lesson	-	0.0	20	35.7	27	48.2	9	16.1	56	100
4	Provision for individual differences	8	14.3	11	19.6	27	48.2	10.	17.9	56	100
5	Provision for transfer of learning	5	8.9	14	25.0	37	66.1	-	0.0	56	100

RESULTS

The presentation of results is better done by the research questions for easy and better understanding of the results. Therefore, the results are presented after each research question.

Research Question 1: What is the quality of instructional delivery in the gifted education programme in terms of student number per class, teachers' lesson delivery and teachers'

In order words the results indicates that most teachers do not deliver the lessons to expectation. The bars on the chart provided better understanding as the modal heights of the bars showed where the majority of the teachers fall in the evaluation. A similar result is observed on the teachers' assessment process of the students except on two items where they are found better. The teachers are good in relating their assessment question to the lesson objectives (42.9%) and keep records of their assessment (33.9%). Majority are however found to be merely fair in asking question varieties (37.5%), distribute question evenly by ability (37.5) and provide

adequate assessment (42.9%). If the results of the analyses on the quality of instructional delivery were given a holistic view from the three sub-variables of class enrolment, lesson delivery and lesson assessment then it can be concluded that the quality is below the standard expected of the gifted school.

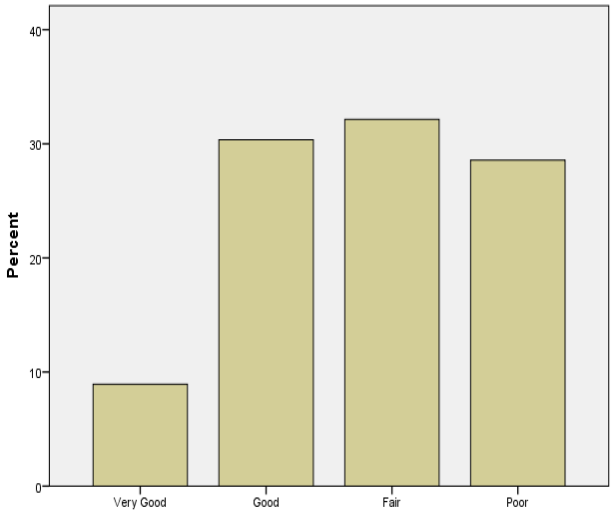

Figure 1. Teachers' performance in determining the students' entry behavior

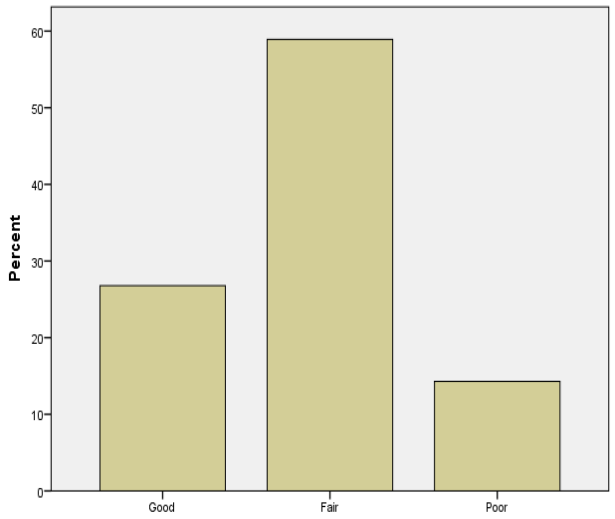

Figure 2. Teachers' performance in the use of appropriate motivational techniques

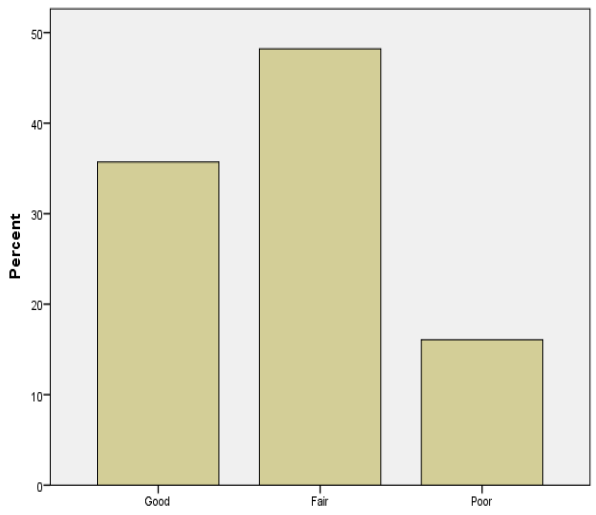

Figure 3. Teachers' performance in the students' involvement

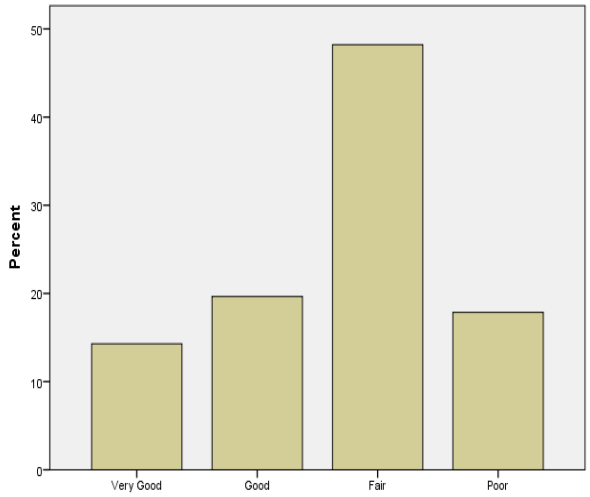

Figure 4. Teachers' performance in the provision for individual difference

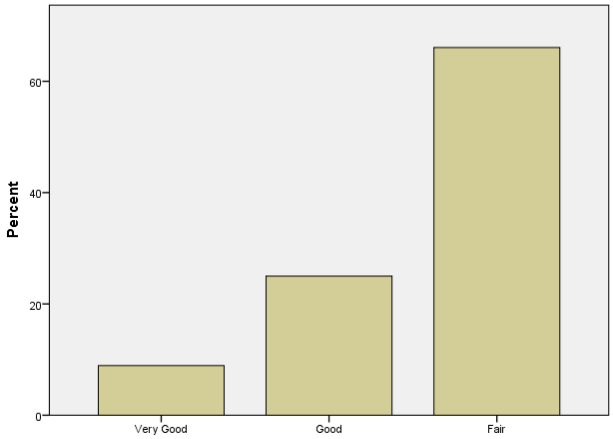

Figure 5. Teachers' performance in the provision for transfer of learning

Research question 2: How qualitative is the curriculum adaptation in the gifted education programme at Federal Government Academy, (Centre for Gifted and Talented) Suleja-Nigeria?

Table 4 showed the result of rating observed from 56 subject teachers' curriculum/scheme of work. The ratings were on 4-point scale very good, good, fair and poor. A higher percentage is on the good scale for most of the items except in the quality of evaluation that has the highest on the fair 55.4% scale. If a divide is taken as good and fair, 62.5% of teachers are good in appropriate selection of adapted curriculum for their subjects. For the provision for differential ability 58.9% of the subjects examined were found good. Again, 51.6% were found good in provision of adapted material while 62.5% were considered good in their adapted content provision. Figures 6-10 showed pictorial representation of the observed rating of the provision of the adapted curriculum. Putting all these together it can be inferred that the adaptation of the curriculum is qualitatively good but its evaluation needs to be improved upon.

DISCUSSION OF FINDINGS

The result with respect to research question one indicates that most teachers do not deliver the lessons to expectation. In holistic view from the three sub-variables of class enrolment, lesson delivery and lesson assessment it was then concluded

Table 3. Descriptive analysis of students' assessment process

		Very Good		Good		Fair		Poor		Total	
		N	%	N	%	N	%	N	%	N	%
1	Relates questions to specified objectives	5	8.9	24	42.9	20	35.7	7	12.5	56	100
2	Asks variety of questions to reflect the various domains and levels	2	3.6	20	35.7	21	37.5	13	23.2	56	100
3	Distributes questions evenly according to abilities	2	3.6	15	26.8	21	37.5	18	32.1	56	100
4	Gives adequate assessment	3	5.4	19	33.9	24	42.9	10	17.9	56	100
5	Keeps continuous assessment records	11	19.6	19	33.9	18	32.1	8	14.3	56	100

Table 4. Descriptive analysis of teachers' adapted curriculum delivery

	How strongly did you agree with the following	Very good		Good		Fair		Poor		Total	
		N	%	N	%	N	%	N	%	N	%
1.	Provision of specific and adapted instructional objectives in clear observable and measurable terms	16	28.6	19	33.9	19	33.9	2	3.6	56	100
2.	Provision for diversity in abilities	4	7.1	29	51.8	23	41.1	-	-	56	100
3.	Provision of specifies and adapted appropriate instructional materials	4	7.1	25	44.6	19	33.9	8	14.3	56	100
4.	Provision for adapted content	3	5.4	32	57.1	21	37.5	-	-	56	100
5.	Relates evaluation questions to adapted objectives	2	3.6	15	26.8	31	55.4	8	14.3	56	100

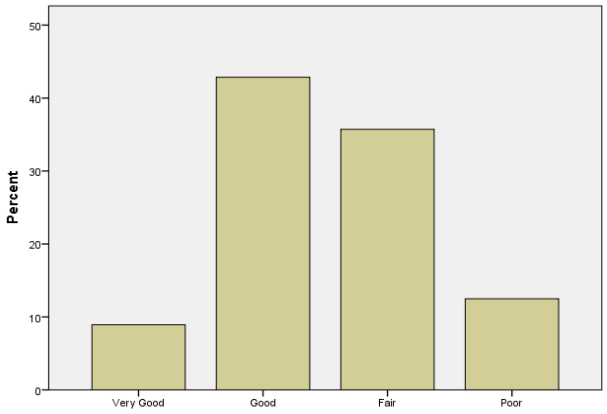

Figure 6. Teachers' performance in relating question to objectives

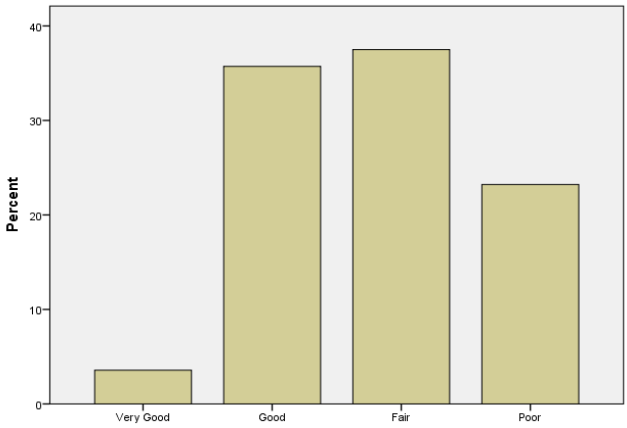

Figure 7. Teachers' performance in asking variety of questions to reflect the various domains and ability levels

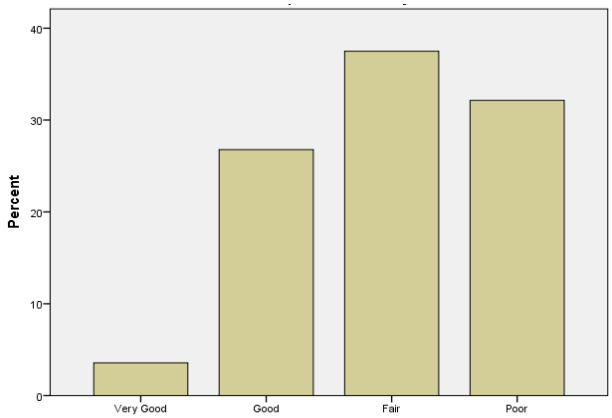

Figure 8. Teachers' performance in testing various domains and ability levels

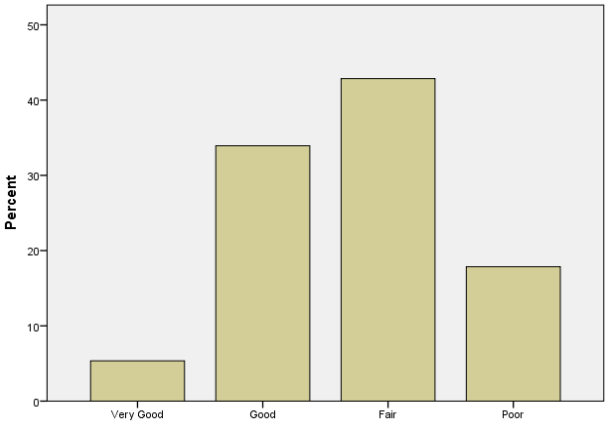

Figure 9. Teachers' performance in giving adequate assessmentduring instructional delivery

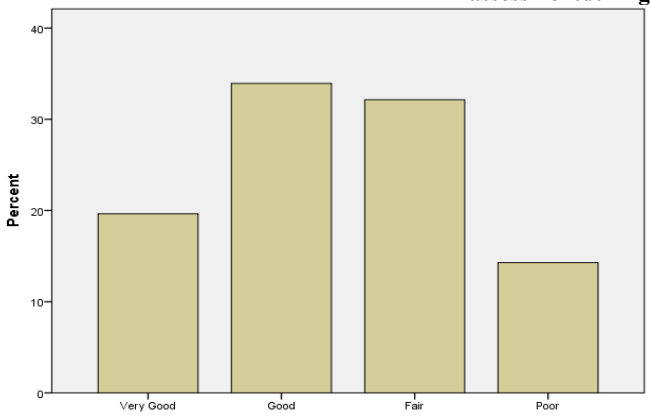

Figure 10. Teachers' performance in keeping assessmentrecord

that the quality of instructional delivery is below the standard expected of the gifted school. This finding is supported by Rimm, (2001) who reported that excellent teachers' strength ratio is a key to gifted education delivery and teachers must understand that gifted student required academic challenges in the classroom. In any case, joining arranging and congruity inside the showing obligations of the classroom has never been simple, so it behooves the teachers to rise to strategizing and devising various instructional techniques and strategies for accommodating gifted and talented in the classroom.

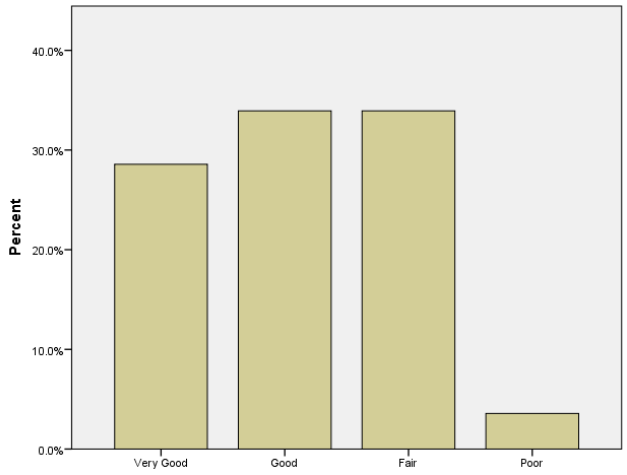

Figure 11. Provision of specificand adapted instructional objectives

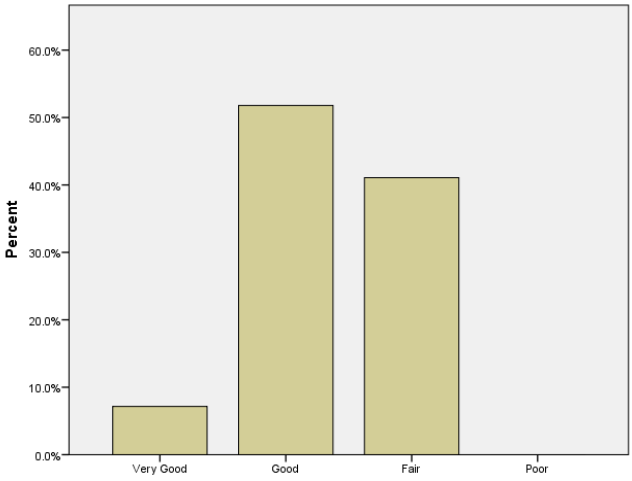

Figure 12. Provision for diversity in abilities

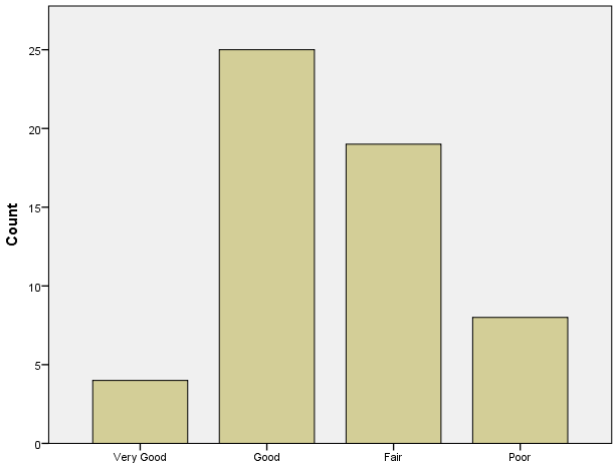

Figure 13. Provision for adapted instructional materials

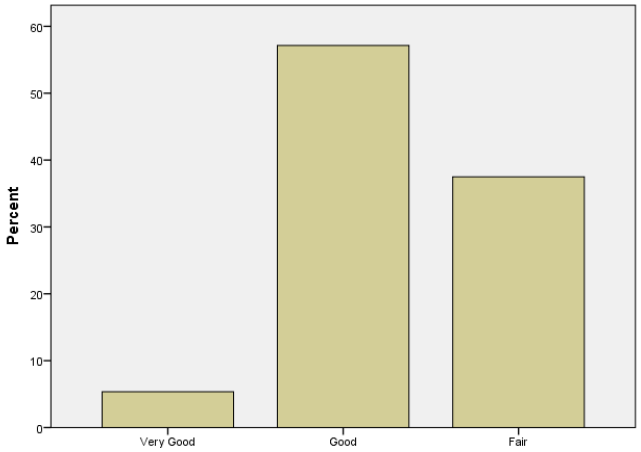

Figure 14. Provision for adequate content coverage

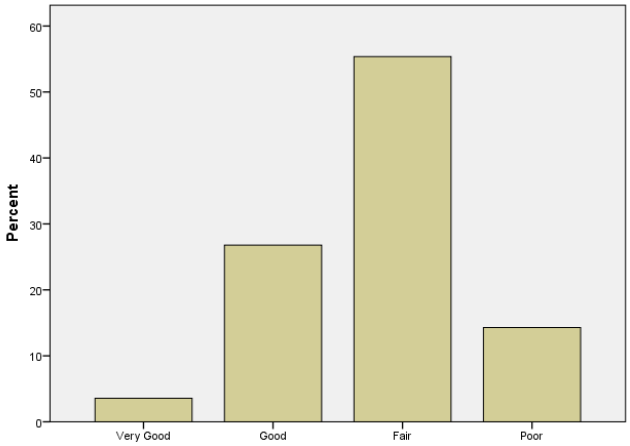

Figure 15. Provision for appropriate lesson evaluation

Wine (2001) also advocated that the instructional delivery for the gifted should take into consideration the interest, ability level, instructional objectives, and the societal value. Putting this consideration in mind will help greatly to realize the potential of the gifted child for the societal gain. This is achievable within appropriate teacher-student ratio size of 1:15. The achievement of high standard in the quality of instructional delivery in gifted education is highly critical to the nation's economic and technological development. Therefore, the finding of this study is very important in drawing the attention of the government and its agencies including all stakeholders to improving quality instructional delivery in gifted education. In answering this research question, the result of the study revealed that the adaptation of the curriculum was qualitatively good but its evaluation needs to be improved upon. The finding is in line with Ward (2010) also reported the need of curriculum adaptation what's more, built up a hypothesis of differential instruction for the skilled that set up particular standards around which a proper educational programs for the talented would be produced. The findings with respect to research question two with respect to the curriculum adaptation which the finding of this study sought Meeker (2006) utilized the Guilford Structure of Intellect (SOI) to land at learner profiles that featured regions of quality and shortcoming with the goal that educational programs organizers could assemble a talented program to enhance powerless territories. Educational programs exercise manuals were organized particularly to address this need in the regions of memory, cognition, joined reasoning, different reasoning, and assessment. Renzulli (1977) concentrated on a separated educational modules display that moved the talented

youngster from enhancement introduction exercises through preparing in considering and research aptitudes into a task arranged program that harped on genuine issues to be illuminated. Curriculum adaptation is essential element in gifted education which needs not to be handled with liberty, including its evaluation which is aimed at ascertaining its strength and weakness. The finding of this study does not come as a surprised but as a pointer to improved gifted education in Nigeria.

Conclusion

Based on the findings from this study, it could be concluded that, the centre for the gifted and talented demands programme review in order to achieve and sustain the purpose of its establishment in the light of its expectations as stated in the national policy on education.

Recommendations

The following recommendation are proffered in the light of the findings in the study

1. Federal ministry of education should conduct comprehensive programme evaluation and needs assessment of the Federal Government Academy (Centre for Gifted and Talented) Suleja,to enable them provide for the effective instructional provision of the gifted learners.
2. The curriculum planner should review the curriculum for appropriate adaptation of the gifted students' interestin the gifted education programme.

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