

# MULTI-GRADE AS A TOOL FOR INFORMATION AND COMMUNICATION TECHNOLOGY IN THE PRE-PRIMARY AND PRIMARY EDUCATION IN NIGERIA

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## **Abstract**

Education is the bed rock of civilization and civilization depends on the type of information and communicative technologies, if a society is well structured and advanced in her mode of operation, there is that likelihood for one to conclude that information and communication process through education are perfectly sound. The educational system therefore must evolve effective and perfect ways of information and communicative technologies (ICT) in its educative process. Multi-grade teaching (MGT) therefore is offered as one of the strategies for education, information and communication technology (ICT) for the Nigerian educational system. This paper will attempt to highlight on the concept, rationale, and objectives, generalization views, curriculum and syllabus of multi-grade teaching. It will also discuss the strategies, difficulties, implications and make recommendations for the attainment of multi-grade teaching in pre-primary and primary school as information and communication technology in the Nigerian educational system

Education as a tool for national development while information and communicative technology the channel need to be assessed and improved upon for the general wellbeing of man and the environment. For man and his environment to develop education through information and communication technology should be harnessed properly for optimal growth and development, hence Okimedim 2008 using Mayor has this to say:

*If we do not invest all our resources, of energy and will in education, the race with catastrophe will be lots and the balance between man and nature will be re-established by disasters that are not only unthinkable but also avoidable. The choice is ours and action is now (pg.3.)*

Investing resources and energy in education, information and communication technology at the primary level will go a long way in strengthening education at higher level for optimal development of the nation. Multi-grade teaching as one aspect of educational information and communication technology will go a long way in strengthening Nigerian educational system. The paper will explore on how multi-grade teaching approach can aid educational information and communication technology (ICT) in Nigerian Educational System.

Multigrade teaching occurs within a graded system of education when a single class contains two or more student grade levels. It is contrasted with the usual pattern of classroom organization in graded systems where a single classroom contains students of only one grade level. In many graded systems, age and grade are congruent, so a grade level is also equivalent to a particular age group of students. However, this may not be the case in systems where grade level repetition and acceleration are common. Okimedim (2010), avers that Multi Grade (MGT) techniques is a veritable tool for reaching the needs of less educative disadvantage areas due to their cultural and topographical

environment. While little (1995), in Adamu (2005) observed that it is a grade teaching of pupils of different ages, grades and abilities in the same group. It is sometimes called “Multi Level”, “Multi Group”, “Family Class” and some case of one teacher school-unitary school.

### **Concept of Multi-Grade Teaching**

Multi-grade teaching is a term used to describe the teaching in primary education of children from a number of grades usually in one class. But it is capable of different definition in different countries as the following examples demonstrate. Multigrade Teaching in Nepal has been described as the situation in which a teacher teaches more than one class at the same time either in the same classroom or in a different classroom.

In the case of China, Multi-grade class or multiple-group teaching is the preferred definitional approach as these terms highlight more ability level and age-based groupings. Multigrade Teaching in Indonesia is commonly found in small to large sized schools in which a teacher teaches more than one grade or class at the same time, either in different classrooms or in the same room divided by a partition. The Philippines sees multi-class teaching as teacher teaches two or more grade levels in one classroom. It may also connote teaching a class of pupils with differing levels of ability and pupils of different ethnic groups who are to be taught in their native languages. In Malaysia, they noted that multi-grade teaching involves the teaching of children from two or more grade levels in one classroom. The combination is usually of grades close to each other; for example, one and two, five and six.

Pakistan and Australia, says, as many as five or six grades may combine in the one class. Such contexts require the employment of particular teaching methodologies and classroom administration. Multi-grade teaching is also

common in almost all rural areas of Nigeria. Miller (2005) observed that the multigrade classroom is an organizational pattern widely used in schools in the United States. He noted that in 1918, there were 196,037 one-room schools, representing 70.8 percent of all public schools in the United States. By 1980, less than 1,000 of these schools remained (Muse, Smith, & Barker, 1987). But the multi-grade classroom persists. For example, in a study consisting of multi-grade classrooms of only two grades, Rule (1983), in Chris (2001) used a sample from a suburban district outside Phoenix, Arizona. Of the 21,000 elementary students in the district, approximately 17 percent were in classrooms that combined grades. In rural, small elementary schools the incidence of students served in multi grade classrooms may well be much higher. Although rural, small schools may combine grades to save money, in the guise of the "ungraded classroom," multi-grade organization has also been a feature of urban and suburban districts.

In the 1960s and 1970s, "open education" and individualized instruction became influential curriculum and instructional models. Such models were commonly implemented with multi-grade classrooms. Energized by developmental theories of learning, a large influx in federal money, and student centered models of instruction; open education became a major educational innovation. As a result, multi-grade classrooms received new attention. Large classes have been a reality for the vast majority of Nigerian pupils. This situation is aggravated by the fact that for many pupils enrolled in schools in rural areas, teachers have to combine a number of classes. Since education at the basic level is of great concern to government, and large classes are more prevalent in public schools than in the private sector.

Multi-grade classes, in which teachers work with more than one curriculum grade at the

same time, are widespread in Nigerian rural schools. In most schools, multi-grade classes arise through necessity rather than choice. In many rural areas, parents do not have the opportunity to choose between sending their wards to a school with multi-grade or mono-grade classes. If they choose not to place their wards in a multi-grade class, the wards will remain uneducated. Accesses to multi-grade classes, and the quality of teaching and learning in them, are teaching strategies in the worldwide fulfillment of Education For All (EFA) and the Millennium Development Goals (MDG) for education in countries all over the world.

#### **Rationale for Multi-Grade Teaching**

Multi-grade teaching is organized as a "necessity model" or as a "design model". In the necessity model groups of children varying in age and numbers are combined together under the supervision of a teacher or two teachers to be taught as a class. This model may be a result of financial constraints, non-availability of teachers or lack of resources. Multi-grade classes of this type are commonly found in sparsely populated areas in rural settings or in areas with high pupil population but few teachers. Multi-grade teaching is also planned as a design with a rationale to meet pupil's individual needs. In this model pupils are grouped together across ages in combinations most beneficial to their educational stimulation and success. Some efforts are made to help teachers develop knowledge and skills to teach in multi-grade schools, yet the problems of effective teaching in multi-grade are persistent. Also, areas with difficult terrain and topography calls for multi grade teaching techniques. In order to address this, there is a need for a study of the situation to find out the existing range and quality of Multi-grade teaching practices and to work in the field to plan intervention for improvement.

#### **Objectives of Multi Grade Teaching**

*Firstly*, multi-grading is often associated with 'small' school, there may be only one, two or three teachers, yet they offer a complete cycle of primary education. If that cycle consists of eight grade levels, then each of these teachers must operate multi-grade teaching system. These 'small' schools are also sometime referred as multi-grade schools. Multi-grade schools have attracted attention in the developing country context because of their potential to increase primary schools participation rate as meeting Millennium Development Goals (MDG) and Education For All (EFA) mandate. By bringing the school closer to the community, they encourage more children, especially girls, into school.

*Secondly*, multi-grade teaching is also common in large urban and suburban schools. In some countries, it is a response to uneven pupil's enrollment. For example, a school with a two and a half grade entry may have to combine two grade levels to make up class sizes. Also, in countries where teachers absenteeism is high, and there is no 'cover', grades may be combined to avoid having a class with no teacher present. A single teacher then has to deal with two grade level groups together. While the latter problem is not well-documented in the literature, it is probably a regular occurrence in countries in both Africa and the Caribbean.

*Thirdly*, multi-grade teaching may be a deliberate response to educational problems. In developed countries, this is linked to the multi-grade perspective. Proponents of mixed age grouping argue that there are sound pedagogical reasons for placing students of different ages together in the same classroom. Mixed age classes, it is argued, stimulate children's social development and encourage greater classroom cooperation. These arguments are seldom raised in the developing country literature, although several commentators take the view that multi-

grade organized classes are potentially a cost effective means of providing quality education in difficult to reach areas.

Finally and in Africa, a major rationale for multi-grade education is probably its potential to increase access to full cycle of primary education in areas where this is currently not available. It has been used for these purposes in Zambia and Burkina Faso, for example. In the Caribbean, the question of access is not so crucial as in most of the region there is already full access to primary education. Rather, multi-grade may be seen as an approach to increasing the quality of schooling by introducing innovative approaches to teaching and learning (World Bank, 1993).

### **Generalization of Multi-Grade Teaching**

Many teachers, administrators, and parents continue to wonder whether or not multi-grade teaching has any effects on pupil's performance. Research evidence indicates that being a student in a multi-grade classroom does not negatively affect academic performance, social relationships, or attitudes. In recent years some significant studies have been carried out on the effects of multi-grade classes on pupil's achievement. In Miller (1991) 13 experimental studies were reviewed assessing academic achievement in mono-grade and multi-grade classrooms and found there to be no significant differences between them. The data clearly support the multi-grade classroom as a viable and equally effective organizational strategic alternative to mono-grade instruction. The limited evidence suggests there may be significant differences depending on subject or grade level. Primarily, these studies reflect the complex and variable nature of school life. Moreover, there are not enough such studies to make safe generalizations about which subjects or grade levels are best for multi-grade instruction.

Veenman (1995) conducted a research concerning the cognitive and non-cognitive effects of multi-grade and multi-age classes (45 of which were concerned with multi-grade classes), drawn from a wide range of countries and nations across the world, both developed and developing. Veenman (1995) in Higgins (2005) found that there were no consistent differences in student achievement between multi-grade and mono-grade classes. The overall median effect size for cognitive outcomes was 0.00, while the overall median effect size for affective outcomes was +0.10. Numerous studies compared the effectiveness of "open" classrooms (multi-grade organization with pupil-centered ethos and methods) and "regular" classrooms (mono-grade organization with traditional ethos and methods). We have learned a great deal from these innovative efforts. Working in an open, multi-grade school requires serious, ongoing teacher training and a commitment to hard work and reinforcement at all quarters.

### **Facts About Multi-Grade Teaching**

However, the finding of no significant difference which existed in the performance of pupils taught using multigrade and mono-grade teaching was explained by Higgins (2005) due to the factors namely: Grouping alone is unlikely to have an effect; learning is more dependent on the quality of teaching than on organizational structure. Bias in selecting more capable pupils into multigrade classes, if it occurs, would deplete the proportion of those pupils in mono-grade classes, producing nonequivalent samples for comparison. Teachers of multi-grade classes are inadequately prepared for teaching such classes and do not have available suitable materials for their teaching. Multi-grade teaching is demanding and leaves teachers with little energy to pursue potentially more effective grouping strategies in their teaching, resulting in the use of the same practices as in single-grade classes.

Most teachers have been trained to work in mono-grade classrooms. Their knowledge of teaching method is based on whole-class instruction and small-group instruction (with groups often formed on the basis of ability or achievement level). When placed in a multigrade setting, teachers of the 60s and 70s discovered that the time requirements and skills needed to be effective were simply not part of their prior training and experience. Although the premises of "open" and "regular" (traditional) education can differ sharply, this findings still applies to multi-grade classrooms in traditional schools.

### **Curriculum of Multi-Grade Teaching**

Organization of curriculum for Multi-grade Teaching is based on two planes. The first is the creation of an ideal model curriculum; the second is the refinement of the real model or models which presently exist in several countries.

### **The Ideal Model**

The key word in any discussion of an ideal model is flexibility. The curriculum has to be very flexible given the nature of Multigrade Teaching. One of the greatest difficulties in promoting Multi-grade Teaching is the inflexibility of grade-based curriculum. In some small Multi-grade Teaching classes or schools in some countries, the teachers are required to cover all the material for a year. For others, the requirement is more. That is, the primary or elementary school syllabus is covered over the total years of primary schooling leaving the teachers the option as to when certain material will be covered. Provided all aspects of the curriculum are eventually covered, the order is not regarded as important. This is a desirable move in the direction of a flexible curriculum. However, flexibility should go much further than this. In an ideal model, integration approach is adopted. Integration in Multi-grade Teaching

has four stages **Firstly** it involves an integration of pupils from different grade levels and competencies. **Secondly**, it also involves integration of the curriculum either with subjects such as science and mathematics, or subjects in the social sciences or a range of subjects being integrated under, say, liberal arts. The **third** form is the very important contribution of curriculum experts should be integrated with the contribution of the practitioners in and the administrators of schools (the teachers and principals). Furthermore, parents and community representatives should form part of any truly integrated curriculum design panel, especially where local content is required. Senior pupils might also be included. A **fourth** aspect to an integrated Multi-grade Teaching curriculum is the way in which it is operationalized. A future model for teaching a Multi-grade Teaching curriculum should consider for inclusion in the teachers' functions the use of pupils as peer teachers and or as monitors. In addition, skilled community persons should be considered as paraprofessional teachers (artists, writers and scientists, for example). Thus, the concept of an integrated curriculum is a critical one in the future development of curricula especially for Multigrade Teaching which, by definition, is founded in a context of integrated learning.

### **The Real Model**

Even in the real world aspects of the ideal model are identifiable in a number of problems. The ideal model talks of allowing the natural course to flow and this can be possible if immediate environment ideas are allowed into the curriculum through the teachers and villagers. Although the present reality is that the curriculum, text-books and evaluation requirements are often fixed in a system, it is important in Multigrade Teaching that teachers approach these problems imaginatively and creatively. Imagination and creativity are

particularly important in dealing with aspects of present curricula which are open to teacher input. One example of this is Indonesia where, despite much of the curriculum being predetermined, there is provision for twenty per cent of the curriculum to comprise local content, a notion towards which Thailand has also moved. The carrying out of this requirement provides the Multigrade Teaching teacher, in particular, with an opportunity to be creative when designing curricula for integrated classes.

### **The Multi-Grade Teaching Syllabus**

The application of a single grade teaching national syllabus in the Multi-grade Teaching situation creates problems. Some of them include:

1. Originally is not structured for Multi-grade Teaching classes.
2. Places a heavier work-load on Multi-grade Teaching teachers compared with their single mono-grade teaching counterparts.
3. Impedes the capacity of the Multigrade Teaching teachers, given the lack of facilities and problems of management at the local level.
4. Does not allow for the time constraints placed on Multigrade Teaching teachers given the preparation time required and the need to address a wider range of students' needs.
5. Syllabi need to be prepared specifically for the Multigrade Teaching context or be able to be adapted to it.
6. Teaching not trained for multi-grade skills and techniques.
7. Classrooms and class setting not conducive for multi-grade.

In most countries, the primary curriculum prescribed is the same for both urban and rural areas. This curriculum usually consists of a list of minimum learning competencies

stated in terms of behavioral objectives which the teacher is expected to achieve with each grade level within a particular time limit. Since the minimum learning competencies are normally specifically designed for regular school situations, the Multigrade Teaching teacher finds it difficult to make the content of his or her teaching meaningful for the children. Most often, the designed curriculum lacks relevance and is dysfunctional when applied to the socio-economic needs and cultural lifestyles of Multigrade Teaching learners and their communities. Moreover, the conceptual and skill requirements of the prescribed curriculum are too great for the teacher to cope with, given the pressing problems and concerns which have to be addressed in the Multigrade Teaching situation.

For these reasons there is a need to re-organize and improve the curriculum for Multigrade Teaching by way of:

- i. Improving the curriculum content by developing subject matter in a way which makes it relevant to the social conditions of the communities and the needs of the target clientele.
- ii. Involving parents, teachers and community leaders in the re-organization and improvement of the curriculum,
- iii. Preparing instructional plans for teachers where various activities are proposed for use with an emphasis on problem solving, and acquiring skills for character and community development,
- iv. Preparing supportive instructional materials that are congruent with the plan of instruction, and
- v. Analyzing the minimum competency requirements so as to identify skills which should be taught directly and those that may evolve from self-instruction.

- vi. A careful study of MGT by stake holders and make sure that special programme of study is design to produce special teachers called “Multi-Grade Teachers”.
- vii. Schools that not meet the pupils and teachers ratio can be grand “Multi-Grade Schools”.

### **Strategies of Multi-Grade Teaching**

There are various strategies of Multigrade Teaching. Some of them include;

#### **1. Multi-grade Teaching (MGT) Based on Grade Teaching**

Based on this technique, a single teacher handles more than one class and teaches all the subjects throughout the whole day. If the number of classrooms is less than the number of classes the teacher should combine more than one class in a single room. To make teaching and learning effective and easy the teacher may group the pupils either on the basis of classes, age, sex, or on the basis of ability. Sometimes the teacher can create mixed groups also. For example, if some of the girls in a class hesitate to sit with the boys, the teacher can make a group of boys and girls, so that their hesitation will be gradually reduced and, after a period of time, they will not hesitate to sit together. Thus mixed grouping is useful to remove shame and hesitation. Mixed grouping is also useful in the classes for singing, dancing, art, indoor playing and other types of activities. This grade grouping based on Multigrade Teaching has almost all of the merits found in single grade teaching. If the number of classrooms is sufficient, but the number of teachers are less than the number of classes and if the number of students are more, in such a situation the teacher need not necessarily combine more than two classes in one classroom. He or

she can put different classes in separate classrooms. However, one teacher will have to teach all the subjects in two different classes in separate rooms at the same time.

This is no easy task! In such a situation, a monitor or group leader can be used and exercise-based activities encouraged. The problem-posing approach or self-directed approach should be followed and the teacher should be an observer or facilitator, with a role of mobilizing the classes. If the numbers of pupils are large, the teacher can adopt groupings, as described above, in the same class. If there is no shortage of teachers (in comparison to the number of classes), but some of the teachers are less efficient in teaching, peer group teaching techniques can be adopted. This technique can also be adopted even in the case of two or more classes in one classroom. In grade-teaching based Multigrade Teaching it is assumed that a teacher can teach all the subjects. However, this may not be the case in all schools. In those situations, it is suggested that grade-teaching based Multigrade Teaching should not be followed.

#### **2. Multi-grade Teaching (MGT) Based on Subject Teaching**

As indicated above, teachers may not be expert in all subjects. They may have better knowledge of a specific subject. Subject teaching based on the Multigrade Teaching technique can serve much better than the technique discussed above in such a situation. Using this technique, more than one class is kept together and the pupils are taught by different subject teachers. The groupings can also be arranged in this situation as was discussed earlier.

However, there are other strategies which suggest that within any classroom situation, grouping techniques should be applied. To

do otherwise implies that all children are the same, like peas in a pod. Yet everything we know about children from our family experiences, from our own learning experiences, from our teaching experience and from a modest review of research tell us that children learn in different ways, each one relying more or less on their own application of their five senses, either specifically or in various combinations. We must be conscious also that, although each child should be developing intellectually, physically, emotionally, socially and aesthetically, each one again has different developmental needs in these five categories. For these needs to be satisfied by schooling, a school class can be divided into various sized groups according to ability in those subject areas which are open to measurement techniques: mathematics, reading, spelling and the like. Social or friendship groupings are quite appropriate for subject areas such as social studies. Within these groups, avenues occur for peer teaching or learning. Yet even as we advocate the necessity for grouping, we do not underestimate the importance of the face-to-face contact of individual students, groups and classes with the teacher. But if it must be, then MGT specialist is used.

**3. Multi-grade Teaching (MGT) Based on Circumstances**

In Multigrade Teaching two distinct organizational and teaching strategies arise which lead to grouping. *Firstly*, a class with two or three grade levels can be organized and taught as though these grades are discrete. Within these discrete grades there should be social or ability groupings. Of course there are occasions when the class can be conducted as a whole; perhaps for cultural subjects, or story reading. Curricular content and time-

tabling strategies are arranged by the teacher to ensure that all students cover the curriculum requirements, obtain a fair measure of the teacher's time and have ample opportunity for self-directed, independent learning. *Secondly*, organizational/teaching strategy involves two or three grades being viewed as one class for much of the curriculum. Thus, ability groupings in mathematics, reading and spelling for example would be multi-aged with brighter younger pupils being grouped according to their ability with older students. Some caution is needed here in that; slower older students may regress if the situation undermines their self-concept and confidence. Thus, a grouping pattern can be orchestrated by a skillful teacher who, at appropriate intervals, re-arranges the groups according to regular progress or completion of topics. The teacher never relinquishes his or her total responsibility for the five basic developmental areas of a child's education mentioned at the outset.

**4. Multi-grade Teaching (MGT) Based on Team Teaching**

Another form of grouping within which the above small or sub-grouping strategies can be implemented is one of a macro nature. Instead of thinking about a normal sized class having two or more grade levels in it, two or three normal grade classes are brought together with their three teachers to form one large group. After such a combination, the ability and social grouping techniques are applied with the three teachers acting as a team, with each one possibly taking responsibility for more of the work in his or her favoured subject areas. Students then have the chance to be influenced by three teachers, rather than one. Teachers in turn have the chance to learn from each other; the weak to be



supported and in-serviced by the strong, the experienced to demonstrate to the inexperienced and the neophyte to bring new ideas from recent Teachers College training to the benefit of the experienced.

#### **5. Multi-grade Teaching (MGT) Based on Groupings**

Grouping strategies, whether they are of the kind which are undertaken in a regular sized class, or under a team teaching arrangement require attention to be given to the physical attributes of the classrooms – perhaps a wall must be removed; certainly the furniture should be moved around. Grouping techniques demand that the teacher “come down off the platform” and conduct whole class or group teaching from any part of the room. Teaching materials, available equipment, and text and library books should all be used to support the teaching-learning process by teachers who are prepared to give their time reflecting on the discharge of their responsibilities.

#### **6. Multi-grade Teaching (MGT) Based on Peer Teaching**

Peer teaching is one form of teaching often neglected by teachers. But it is a strategy which, well handled, has many advantages. The first of these is that students may well learn better from their peers than from formal teaching. Secondly, peer teaching enables older students to reinforce their own learning. Thirdly, teachers can be very much assisted by senior students in marking work and supervising classes. Multigrade Teaching provides a very normal setting for this type of teaching to flourish. This technique encourages students to compete and surpass one another in learning.

Situations exist in which peer teaching can flourish. One such country is China where

the teaching situation among some communities is that classrooms are plentiful but there is only one teacher. In this situation an older student is used to supervise work in one classroom while the one teacher teaches in another.

#### **Problems/ Difficulty in Multi-Grade Teaching**

Emphasizing the problems of multigrade teaching, Beneviste and McEwan, (2000) mentioned four potential factors which include lack of faith in multigrade pedagogy, professional and social isolation, difficulties of teaching in a multigrade classroom, and 'ownership' of multigrade teaching. Each of these factors has implications for the development of multi-grade teaching programmes in developing countries. Other observed teaching problems of Multi-Grade teaching include;

- i. Negative attitudes to multigrade teaching.
- ii. Lack of flexibility in curriculum and time tabling.
- iii. Inadequate infrastructure and lack of instructional materials.
- iv. Lack of policy on multigrade teaching and small schools.
- v. General lack of knowledge about multigrade teaching even in teacher education institutions.
- vi. Lack of support systems for multi-grade teachers, whether pre-service or in-service.
- vii. Lack of sufficient information and communication on Multi-Grade.
- viii. Lack of incentives for Multi-Grade teachers and Learners.
- ix. In absents of specialist called multi-grade teachers.

#### **Implications for Improving Multi-grade Teaching**

Miller (1991) advanced the following planning and policy measures that could be

evolved to improve multi-grade teaching techniques in Nigerian Schools:

1. Clear-cut policies on; Maximum and minimum enrolment in multi-grade classes and Assignment of school head teachers /principals and teachers to manage and organize grade classes;
2. In-service training programs on national, regional, divisional levels for teachers, school administrators and supervisors of multi-grade classes, with emphasis on; Programming of class activities and budgeting of time, Grouping children for instruction, Curriculum implementation, Preparation of instructional materials and Classroom management
3. Priority given to multigrade classes in the distribution of instructional materials and supplies
4. Priority given to schools with multigrade classes in the distribution of extension, positions and school buildings
5. Training programs in teacher education institutions included in multi- grade teaching
6. Incentives provided for teachers who have performed well as multi-grade teachers in form of: merit increase in salary.
7. Out of station incentives, additional credits or points in the performance rating, special commendations and /or assistance.
8. Multi-grade teaching offered as a field of specialization in pre-service training of teachers and as a special course for non-qualified teachers handling such classes in remote/rural areas
9. Need to evolve national policy on multigrade teaching in the country.
10. There should be special teacher called Multi-Grade Teacher (MGT) who is specially trained and assigned multi-grade teaching programme.

### **Conclusion**

Multi-grade teaching approach is necessitated by the need to ensure that pupils in rural areas and difficult terrains are given access to education like their counterparts in urban setting in Nigeria. It is a strategy towards achieving the EFA and MDGs educational goals. The efforts of the Federal Government of Nigeria at meeting these educational goals are highlighted in the paper. The paper examines the objectives of multigrade teaching and its operation in Nigeria. Two models `Multigrade Teaching Model' and `Combination Models' were developed in the paper. The models emphasized simple system approach to multigrade teaching technique and highlighted the challenges, requirements and class-grouping combinations respectively.

### **Recommendations**

The following suggestions/ recommendations are made improving and strengthening multi-teaching in pre-primary and primary schools for optimal growth and development in the Nigerian educational system.

1. Sensitization of stakeholders on multi-grade teaching particularly, teaching training institutions and commission and or institutes such as NCCE, NTI, and UBEC to raise awareness and correct negative attitudes.
2. Mobilization of communities to support multi-grade schools.
3. Make schools child-and teacher-friendly.
4. Provision of adequate instructional materials and infrastructure.
5. Recruitment of teachers from the school communities.
6. Policy statements on small schools and multi-grade teaching incentive for multi-grade teachers.
7. Opportunities to observe and learn from models of good practice from other countries.

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8. Professional support for multi-grade teachers through in-service training and appropriate materials for multi-grade teachers.
  9. Inclusion of MGT in pre-service training of primary and secondary school teachers.
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