

# Improvisation and Integration of Local Instructional Materials in Junior Secondary Schools in Niger State, Minna

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**Abstract:-** Improvisation and integration of Local instructional materials in the teaching and learning of social studies in the Junior Secondary School was investigated. Four research questions and two hypothesis were formulated and tested at 0.05 significant levels. Population for the study comprised all Junior Secondary school social studies teachers numbering 32 and 4.25 junior secondary school two (JSS 2) students in Minna municipal council of Niger State. Sample size consisted of the 32 Social studies teachers and 200 social studies students from the 10 Junior Secondary schools in the municipality. The students were selected using simple random sampling technique. The instruments for data collection were social studies teachers questionnaire (SSTQ) and social studies students questionnaire (SSSQ). Data collected were analyzed using simple percentages and mean. The instruments were subjected to a test technique, and a positive result of 0.71 was satisfactorily recorded using Pearson product moment correlation coefficient. Results of the analysis showed that the improvisation and integration of instructional materials in the Junior Secondary schools were at its lowest ebb. There was no gender influence in the improvisation and integration. Among the recommendations made was that understanding and development of indigenous art technology, aesthetics, beliefs, values and attitudes should be intensified so that the social studies students would not be denied the opportunity & meaningful learning interactions.

**Keywords:** improvisation, instructional materials, junior secondary schools.

## I. INTRODUCTION

Education is considered as the most important tool towards the development of any nation. It equips an individual with necessary skills to be useful to himself, the society and the nation at large. The proliferation & secondary school education institutions has led to expansion of educational opportunities and its resultant instructional problems which the use of instructional materials could partially solve. Due to the rising cost of imported instructional materials and the present economic recession, it will be wiser to embark on a mass Local production & instructional material. Dependence on expensive imports of educational materials and equipment cannot benefit the country (Nigeria) in the long run in terms of Finance, Cultural relevance and Curriculum flexibility (Talabi; 2015). This phenomenon has created an acute shortage of instructional materials as means of effective classroom communication. To cope with the above problems, therefore, efforts must be made to improvise and integrate

local instructional materials which constitute essentials of instructional technology in the classroom. This makes it imperative that teachers should think of how best to improvise (produce) and utilize locally made instructional materials in the absence of the original in the classroom.

However, social study is one of the compulsory Vocational subjects offered at the Junior Secondary School Certificate Examination (JSSCE). It seeks to achieve in the students power of keen observation, memory, imagination, qualitative aesthetic judgment, ability to express ideas and courageous to construct creativity with power of vision (Ekeada, 2016). But Eisner (1972) opined that social study has not enjoyed a place of prominence in schools because of the ways in which it has been poorly taught. Many social studies teachers lack the ability to handle and make use of instructional materials which lead to improper lesson delivery that affects students performance (Amulobi 2016). Social studies students are denied the ample opportunity of meaningful learning instruction. Some of the social study instructional materials that can be improvised and integrated in the classroom includes:

Chalkboards, charts, drawings, pictures, posters, graphs, display boards, models, audio-tapes and video-tapes. Hence, the researchers wish to find out if social studies teachers actually improvise and integrate local instructional materials to save the precarious situation.

### *Instructional Materials:*

Instructional materials refer to a broad-range of resources which can be used to facilitate effective and efficient classroom communication (teaching and learning). Ema (2016) identified two main types of instructional materials, namely real materials and substitutes. Real and representations include those materials that learners can see, hear, read, manipulate or talk about, which can enhance teaching and learning in the classroom, they can be classified according to the senses as: visuals, audios, audio-visuals, projected and non projected, prints, non prints, software, hardware materials e.t.c.

The use of instructional materials aim at maximizing the employment of the five senses (sight auditory, touch, smell and taste) in any communication or instruction. They

also enable the teacher to teach less and the learner to learn more. For instance, words can describe a cup, but it is very bad to tell anyone exactly what a cup looks like without a picture, of a cup.

Danjuma cited in Ema (2016 p. 232), identified the following as the achievements of the properly used instructional materials:

- 1) They supply a concrete basis for conceptual thinking and reduced meaningless word responses.
- 2) They make learning more permanent.
- 3) They have a high degree of interest for students.
- 4) They offer a reality of experience that stimulates self-activity on the part of students.
- 5) They contribute to growth of meaning and hence to vocabulary development.
- 6) They provide experience and contribute to the efficiency, depth and variety of learning.

#### *Improvisation and Integration of Instructional Materials*

Improvisation of instructional materials is the desire of an effective teacher to help the learner to share and acquire purposeful and meaningful learning. The gains of improvisation will help the teacher and learner to achieve their instructional problems.

Improvisation aims at giving the same results which the use of an original but non-available material is expected to perform. Zubairu (2017), observes that improvisation simply refers to the act of making up for deficiencies in the process of teaching and learning. Ofoefuna and Eya cited in Ema (2018) see improvisation as techniques originating a totally new tools, instrument, material, device or modifying an existing one for a particular purpose.

Improvisation may be by substitution or by construction. Improvisation by substitution involves the use of an already made functional local instructional material in place of an original one that is not available. While, improvisation by construction means the construction/production and use of an instructional material entirely by a resourceful and creative teacher when the original material is not available. Nakaka and Adamu (2017) opined that:

Tape – recorder is used to re-play the taped activity, while the projector helps to shoot the accompanying images on the screen. Instead of the classroom teacher to wait for the school authorities to provide huge sums of money for the costly audio-visual gadgets and face the attendant problems of maintenance and storage, improvisation can be designed. The teacher's voice can replace the tape recorded as he reads, whereas the flannel/magnetic board serves to display the pictures cut out to accompany the sounds. The teacher does the posting of the pictures on the board at the relevant moment of the teaching and learning process.

Tukura (2017) emphasized that the benefits of improvisation will enable both the teacher and the learner to come out of their educational predicament, especially in Nigeria situation, Ofoefuna and Enya cited in Ema (2018) opined that the following steps could be considered while improvising an instructional material:

1. Choose your topic
2. Analyze the topic – try to see the components of the topic. How could it be carried out?
3. Define your target audience
4. State your instructional objectives
5. Choose your teaching method (s)
6. Determine the appropriate instructional material to go along with the topic considering your objectives, methods, resources available, teachers capability and experience.
7. Design the material
8. Trial test (formatively and summatively)
9. Prepare to go to the classroom to teach
10. Implement (teach and make use of the design material)
11. In addition to the above points evaluate to find out how far the improvised materials have achieved the stated objectives and improved the entire instructional system elements.

Other gains of improvisation in the classroom according to Bassey and Bisong (2009, P-184) include:

- a. They are custom-made to meet the objectives of the lesson for which it was designed.
- b. They are usually less costly compared to conventional ones.
- c. The design and production process adds to the teachers professional growth and competence.
- d. Teachers usually involve students in the design and production skills and they also learn better.
- e. Teachers teach better with materials produced by them.
- f. It makes teachers more resourceful, creative, versatile and less dependent on other people for the solution of the instructional problems.

The process of teaching and learning should have a step by step approach to enable the realization of the instructional objectives. This can be achieved through integration simply refers to step-by-step presentation of instructional materials in teaching – learning process. Instructional materials are integrated at the introductory stage to introduce the lesson, they are integrated at the presentation stage to present the content of the lesson and they are integrated at the summarizing stage to summarize the lesson (Tukur and Junaid, 2006).

The following guidelines could as well assist the teachers in the integration of local instructional materials which include:

1. The teacher should prepare himself very well: This means that the teacher should know the subject matter very well and plan his lessons very well and above all, be resourceful. The teacher must be physically, mentally and psychologically sound to analyze instructional materials in classroom setting (Ughamadu 2009).
2. The teacher should prepare the environment: Here, the teacher should arrange properly all necessary materials needed for classroom instruction. He should consider the facilities available in order to enable him select the most appropriate material for any lesson.
3. Prepare the class: Classroom management should be intensified. The students should be well seated and free from any disturbance to studies. They should be exposed to the most appropriate instructional materials which will facilitate their hearing positively.
4. Integrate the selected instructional materials: The teacher should ensure effective use of the materials selected. It can be used to introduce, present or summarize a lesson.
5. Institute follow-up activity: The teacher should evaluate the students by asking and answering questions from the students.

#### *Problem of the Study*

Many Junior secondary schools do not have social studies instructional materials to enable effective teaching and learning in the classroom. As a result, students find the lesson boring and not easy to understand, thus creating a disinterest in the subject. Hence, students do not perform very well. The inability of teachers to effectively improvise and integrate social studies instructional materials in teaching – learning process is also significant. It is therefore necessary to find out if the social studies teachers do improvise and integrate local instructional materials in their teaching and learning process in Junior Secondary Schools in Niger State.

#### *Purpose of the Study*

This study has the following objectives

1. To determine if social studies teachers actively improvise and integrate instructional materials during lesson delivery.
2. To find out if there is gender influence on the improvisation and integration of social studies instructional materials
3. To ascertain the factors militating against the teacher's ability in the improvisation and integration of local instructional materials.

#### *Research Questions*

1. What local instructional materials do the social studies teachers improvised for their teaching-learning processes?

2. To what extent do teachers integrate the improvised instructional materials in their teaching-learning processes?
3. What are the problems militating against the improvisation and integration of local instructional materials in their teaching-learning processes?

#### *Hypotheses*

Ho: There is no significant difference in the mean scores of male and female social studies teachers in their improvisation and integration of social studies instructional materials in the classroom ( $p < 0.05$ ).

## II. METHODOLOGY

#### *Research Design*

The research is an analytical research design

#### *Area of Study*

The study was purposively carried out in the junior secondary schools in Minna municipal council of Niger State of Nigeria.

#### *Population of the Study*

Population of the study comprised of all the J.S.S social studies teachers and students in Minna municipal council. There are 32 J.S.S teachers and 4125 JSS II students in Minna municipal council (SEMB, 2010). There are ten JSS schools in the municipality.

#### *Sample and Sampling Techniques*

The sample consisted of two hundred (200) social study students and 32 teachers drawn from 10 schools. The total sample size for the study was two hundred and thirty two (232) respondents. Simple random sampling techniques was used in selecting the students for the study. While all the teachers and schools were purposively selected based on their small size.

#### *Instrument for Data Collection*

Instrument used for the study were the Social Studies Teachers Questionnaire (SSTQ) And Social Study Students Questionnaire (SSTQ). SSTQ was used to collaborate the teachers performance in social study subject.

#### *Validation and Reliability of Instrument*

Race and content of validation of the instrument was established by three teachers. Two are educational technologist while third is an expert in measurement and evaluation from Niger state University (IBBU Lapai). The instruments were subjected to test technique with a group of five teachers and twenty students from another local government council.

A positive result of 0.71 was satisfactory recorded using reason product moment correlation coefficient test.

*Procedure:*

The researchers finally administered the whole questionnaire face to face to 32 social studies teachers and 200 JSSII students. One hundred percent (100%) return was recorded.

**III. DATA ANALYSIS AND RESULTS**

The data collected were analyzed using simple and percentages and mean. A four point likert rating scale of SA, A.D and SD were used in weighing the teachers responses, and always, sparingly, not always and not at all for students responses. The cutoff point was determined by summing up

the normal value and dividing by the total number of scaling items.

There were four research questions and one hypothesis postulated to guide the study. The data for these are as presented below.

*Research Question One*

What local instructional materials do the social studies teachers improvised for their classroom teaching and learning process?

Table: Local Instructional Materials Improvised by the Social Studies Teachers

S/N	Item rated response	Test	%	No	%	Total	%
1	Chalkboard	31	96.87	1	3.13	32	100
2	Charts	25	78.13	7	2.87	32	100
3	Drawings	24	75	8	25	32	100
4	Pictures	5	15.62	27	84.38	32	100
5	Posters	7	21.88	25	78.12	32	100
6	Graphs	1	3.13	31	96.87	32	100
7	Display boards	7	21.88	25	78.12	32	100
8	Models	23	71.88	9	28.12	32	100
9	Audio tapes	8	2.5	24	74.9	32	100
10	Video tapes	2	6.25	30	93.75	32	100

N = 23

Table 1 revealed that social studies teachers improvised chalkboard (96.87) Charts (78.13) Drawing (75), and models (71.88) while pictures, posters, graphs, display board, audio tapes, and video tapes were not.

*Research Question Two*

To what extent do social studies teachers integrate improvised instructional materials in their teaching and learning process?

Table 2: Social studies teachers' response on the integrating of improvised instructional materials.

S/N	Items Rate	Always	Not Always	Sparingly	Not at all	X
1	Chalkboard	29	1	1	1	3.81
2	Charts	4	22	3	3	3.80
3	Drawings	4	15	7	16	2.53
4	Pictures	4	8	10	11	1.72
5	Posters	4	2	10	20	1.44
6	Graphs	4	2	3	29	1.10
7	Display boards	4	2	10	22	1.38
8	Models	4	21	5	16	2.47
9	Audio tapes	4	21	9	23	1.28
10	Video tapes	4	21	2	30	1.10

N=32

Table 2 showed that smaller proportions of improvised instructional materials are integrated by social studies teachers during their teaching and learning process whereas a greater number are not integrated. The instructional materials integrated are chalkboard (3.81), charts (3.80) and drawings

(2.53), while pictures, posters, graphs, display boards, models, audio tapes and video tapes are not integrated during any teaching and learning process.

*Research Question Three*

What are the problems militating against the improvisation and integration of local instructional materials by social studies teachers?

Table 3: Social studies teachers response on the problems that militate against the improvisation and integration of instructional materials.

S/N	Statements	Responses				
		SA	A	D	SD	X
1	Lack of skills to produce and use instructional materials			2.1		2.1
2	Ignorance on how to produce and integrate instructional materials			2.19		2.19
3	Lack of produce/improvise instructional materials			2.03		2.03
4	Lack of materials to use the production		3.1			3.1
5	Lack of organization of workshops, seminars and conferences on how to produce instructional materials		3.38			3.38
6	Lack of short course and in-services training on the production and used of instructional materials		3.35			3.25
7	Poor salary structure and allowances		3.25			3.34
8	Lack of discipline on the tutors		3.34	2.38		3.38
9	Lack of motivation by the government		3.34			3.34
10	Lack of power supply and support facilities		2.97			2.97

N=32

Table 3 showed that many problems are prohibiting social studies teachers from improvising and integrating improvised instructional materials.

The factors include the lack of materials to use in the improvisation, lack of organization of materials to use in the improvisation lack of organization workshops seminars and conferences. Others are lack of short course and integration of motivation and electricity power supply. The table also

reveals that the teachers have the skills ignorance lack of time and discipline do not hinder social studies teachers from improvising and integration materials.

*Research Question Four*

To what extent do social studies students study with improvised instructional materials in their teaching and learning process?

Table 4: Students Response on the study with improvised instructional materials

S/N	Items	Rate	Always	Not Always	Sparingly	Not at all	X
1	Chalkboard		155	35	10	-	3.73
2	Charts		-	130	65	5	2.63
3	Drawings		10	150	40	-	2.85
4	Pictures		-	37	160	3	2.17
5	Posters		-	10	140	50	1.80
6	Graphs		-	4	26	170	1.17
7	Display boards		2	4	36	158	1.24
8	Models		-	130	50	20	2.55
9	Audio tapes		-	-	50	150	1.25
10	Video tapes		-	-	20	180	1.10

N = 200

Table 4 revealed that students study with chalkboards (3.73), charts (2.63), drawings (2.85), and models (2.55) during teaching and learning processes, while the other items were never used. The table has collaborated with table 1 and 2 which revealed that social studies teachers actually improvised and integrate only chalkboards, charts, drawings

and models in their teaching-learning processes. Rather the remaining items-pictures, posters, graphs, display boards, video tapes and audio-tape were neither improvised nor integrated in their teaching learning process.

*Hypothesis testing*

**Ho: There is no significant difference in the mean scores of male and female social studies teachers in their**

**improvisation and integration of local instructional materials in the classroom ( $p < 0.05$ ).**

Table 5: Analysis of Male and Female Junior Secondary School Social Studies Teachers in the Improvisation and Integration of Instructional Materials.

Gender	N	X	SD	df	t-cal	t-critical	Dec
Male Teachers	12	28.58	5.35	30	-2.69	2.042	Accepted
Female Teachers	20	29.30	5.41				

The result in table 5 above showed that t-calculated value (2.69) was less than the t-critical value (2.042) with 0.05 level of significant. Based on the result, the null hypothesis is not rejected. Hence there is no significant difference between male and female junior secondary school social study teachers in the improvisation and integration of local instructional materials.

#### IV. SUMMARY OF FINDINGS

- JSS Social study teachers improvise very few local instructional materials such as chalkboards, charts, drawings and models while pictures, posters, graphs display boards, audio-tapes and video-tapes are never improvised.
- JSS teachers integrate only those few materials they improvised. This was collaborated by the students response in table 4 which revealed that they study with only the instructional materials such as chalkboards, charts, drawing and models, integrated by their social study teachers during their teaching learning processes.
- There is no gender influence on the act of improvising and integrating local instructional materials in the classroom.
- Many problems hinder the social study teachers from exercising their effective teaching. These factors include the lack of adequate skills of improvisation and integration of instructional materials; lack of materials to be used in the improvisation (production) of instructional materials; lack of organized workshops, seminars and conferences. Other are lack of short courses and in-service training of the teachers, lack of motivation, poor remuneration, inadequate electricity power supply and essential support services
- Finally, the study also revealed that the improvisation and integration of instructional materials in the junior secondary schools in Niger State where at its lowest ebb.

#### V. CONCLUSION

True technology must be partly indigenous and home-made. Improvisation and integration of local social study instructional material are the desire of effective teachers

to help the learner to share and acquire purposeful and meaningful learning in the classroom. The gains will also help the teacher and the learner to achieve their instructional problems. This makes it imperative that teacher must think of how best to improvise instructional materials so that they can achieve their lesson objectives. This will enable the social study students not denied the ample opportunity of meaningful learning interaction's. Therefore teachers must be resourceful, creative and possess the professional competence not only in the production of local instructional materials but also in their integration in the lesson delivery for the attainment of educational goals.

#### VI. RECOMMENDATIONS

1. True technology must be partly indigenous and homemade. Dependence on expensive imported instructional materials cannot benefit the classroom in the long run in terms of finance, cultural relevance and curriculum flexibility. Hence the ability to acquire effective skills of improvisation and integration by social study teachers should be intensified.
2. State universal basic education authority should immediately organize workshops, seminars and in-service training programmes for teachers in order to update their knowledge and skills in the act of improvisation and integration of instructional materials in the classroom.
3. There should be an educational technology resource centre in the municipality to enable teachers make consultations on the production/integration of relevant instructional materials.
4. Understanding and developing of indigenous art technology, that social study students would not be denied the opportunity of meaningful learning interactions.
5. The Federal government should motivate the teachers through the payment of enhanced salary structures, provision of regular electricity power supply and other essential support services to ensure effective classroom teaching learning delivery.

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