

Data Inquiry and Analysis for Effective Administration: A Comparative Study of Private and Public Secondary Schools

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ABSTRACT This study identified, analyzed the availability, management and impact of accurate data management in the administration of private and public secondary schools. Three instruments made-up of two checklist with forty-seven items each and a 16 item questionnaire was administered to 2979 respondents in 273 secondary schools used in this study. Three research questions were raised and six hypothesis were formulated, answered and tested respectively using frequency percentage, chi-square and analysis of variance at 0.05 level of significance. Results revealed the availability and accurate measurement of the following data in schools: attendance register, weekly dairy of work, school time-table, lesson note and plan, subject syllabus and duty roster. There is difference in the availability and management of the data between private and public schools. There is no significant difference in the availability of data in rural and urban schools. Principals and teachers in public and private schools identified enhancement of decision making, accurate assessment of teachers and students, promotion of reliable and adequate planning as impacts of accurate data management in the Administration of secondary schools.

INTRODUCTION

Secondary education is an important level in skill manpower development, through formal education. The level at which, student's area of specialization starts surfacing. In many third world countries, of which Nigeria is one, a dropout rate and transition to university from this level is high and low respectively, without accurate data to ascertain. This has been a source of concern for educational administrators, citizen and policy makers.

With individual and government huge investment in secondary education, one expects secondary schools to justify the value and effectiveness of their programs.

In other to plane effectively, to reduce the dropout, failure and withdrawal rates, there is need for adequate and reliable data. Holcomb (1999) stated that Boards are mindful that allocation of state and Federal funds often necessitates documented evidence that school programs lead to verifiable improvement in students achievement.

Hence according to Nwagwu (1995: 5)

"school records are legal and administrative documents. They are public records, that is any interested member of the public may seek

permission to see the records .the school board has the implied power to make and enforce-reasonable rules and regulations on school records and how they should be kept for the efficient management of the schools.

The records are sources of data school management.

Adequate data on students academic performance and family history could increase students' academic achievement. According to Ilori (1995: 11) "To increase students performance, one may need to searc for a linkage between socio-economic background and learning outcome. Other relationship between clusters of variable may be investigated. Disciplinary problems associated with students may be traced to background and personal characteristics.

Analysis of relevant data may therefore lead to proper resolution of such problems. It is cleat that speedy processing of students data would enhance students learning outcome.

Teachers performance can also be measured using required reliable and timely information in them. School head and teachers should have accurate information of all the activities in the school for effective and easy decision making, aids educational grant procurement and also to satisfy legal requirement and continuous

assessment (Nwaidian, 1994; Adeyemo et al., 1995; North Central Regional Educational Laboratory, 2000)

If data are scientifically collected and adequately analyzed, information derived provide an accurate way of identifying problem areas in school management; through the formulation and implementation of corrective courses of action that can solve problems and meet a school's goals. Once improvement strategies are under way, Educational Administrators can continue to analyze the data to monitor and refine their efforts (Feldman and Tung, 2001).

Educational administrators and scholars have identified different kind of data that are necessary for effective management of education. Fagbulu and Duze (1998) identified 29 records, Adeniyi (1989) 31, Multi Resources Associates Ltd. (1990) 44. Nwagwu et al. (1991) identified; admission register, staff records, school budget, log book, attendance register, record of school plants and equipment, as six statutory records that must be kept in Nigerian schools. Similarly, Wade (2001) identified students' assessment data, student demographic data, perceptions data document i.e. how a school is perceived not only by its students, teachers and parents, but by the community at large and school program data i.e. defines programs instructional strategies and classroom practices.

On record keeping in secondary schools, Ogonor and Ojoh (1995) concluded that 60% of the important records are kept, stock book (20%) and eighty-eight percent of urban schools kept records while only 58.89% of rural schools kept records. All school kept records on admission and attendance register, 90% kept records on time-book, syllabuses, school diaries and record of work, staff records and cumulative records. No school kept records on family history and health.

In view of the importance of educational data to effective planning, problem identification in area of teachers and students strengths and weakness in knowledge and skills, implementation of instructional and administrative activities in secondary schools, the study investigated the state of educational data in private and public secondary schools in Delta state, Nigeria.

Research Questions

This study was design to provide answer to the following research questions.

1. Which educational data are available in secondary schools?
2. is the availability and management of educational data affected by the type of school ownership?
3. What are the impacts of accurate data management in the administration of secondary schools?

Hypotheses: The following hypotheses were formulated and tested in this study.

- (1) There is no significant difference in the availability of data between private and public secondary schools
- (2) There is no significant difference in the accurate management of available data between private and public secondary schools.
- (3) There is no significant difference between the availability and accurate management of data in secondary schools.
- (4) There is no significant difference in the availability of data between urban and rural secondary schools.
- (5) There is no significant difference among principals, teachers of private and public secondary schools on the identified impacts of accurate data management in the administration of secondary schools.
- (6) There is no significant difference among, enhancement of decision making ,make accurate assessment of students academic performance and behaviour promote effective school supervision, serves as legal document, make planning possible, reliable, provide accurate and reliable information for career Guidance and promote accurate assessment of teachers as impact of accurate data management on the administration of secondary schools.

METHOD AND PROCEDURE

This study is a descriptive survey designed to investigate the availability and management of data. It also identify the impact of accurate data management on the administration of private and public secondary schools.

Subjects: The population of this study is 11,336, made-up of 546 principal, 10,790 teachers in public and government approved private secondary schools in Delta State. In the course of this investigation, 2979 respondents made up of 173 pubic school principals, 100 private school

principals, 1048 (42%) private school teachers and 1658 (20%) public school teachers. The respondents were selected from 173 public and 100 government approved private secondary schools. The stratified random sampling method was used to obtain the sample from the twenty five local Government Areas in the three senatorial districts in Delta State, Nigeria.

The Survey Instrument: Three instruments were designed by the researcher and entitled;

- (1) Educational data checklist with 47 items.
- (2) Data management checklist with 47 items.
- (3) Impart of accurate data management in school administration questionnaire with 16 items.

The first instrument, educational data check list (EDC) was drawn from a list of school record and educational data designed by experts in Educational Administration (Nwangwu et al., 1991; Multi Resources Associate, 1990; Wale, 2001; Nwangwu, 1995). Hence, the instrument is valid.

The second and third were drawn based on national norms with expert advice and a pilot test on 30 principals and 60 teachers who did not form part of the respondents for the study. The reliability of the instrument were 0.80 and 0.82 respectively, which were considered adequate for the study.

Data Collection and Analysis: Trained research assistants who were Master in Educational Administration and Post graduate Diploma in Education (PGDE) students of the Delta State university Abraka and teachers in the area, were employed and supervised by the researcher to administer the instruments.

The three instruments were administered to the 273 principals. School records were verified in relation to the second instrument by the researcher and his assistants. The third instrument was administered to 2979 respondent made up of 273 principals and 2706 teachers. A hundred percentage success was recorded because, the instruments were responded to by principals and colleagues of the research assistants and students of the researcher.

Each subject in the third instrument was scored on the bases of his/her responses to the items in the four Likert- scale questionnaire. Scoring was done in order of strongly agreed (SA) 4, Agreed (A) 3 Disagreed (D) 2 and strongly Disagreed (SD) 1, based on the degree of acceptance or rejection of the positively stated questionnaire items by the respondents.

The research questions were answered using

frequency table, and percentages. The research hypothesis were tested using chi-square and Analysis of Variance (ANOVA) at 0.05 level of significance.

RESULTS

Results generated were presented according to research question and hypothesis.

Research Question 1: Which educational data are available in secondary school.

From Table 1, the following data are available in 90 to 100 percent of both private and public secondary school: attendance register students report forms, admission registers log book, visitors, book, weekly daily of work minutes of staff meetings, subject syllabuses. Past students' records, external examination result analysis and teachers movement books. Data available in 75 to 89 percent of both private and public schools are: student class attendance for teachers, Fees register, academic performance record, punishment/ Discipline record, Records of parent Teachers Association Contribution, Games and sports record, staff record, stock book and inventory, cash book, Transfer certificates, seniority list, inspection report book, P.T.A minute book, and student teacher record book. Data on family history (45 percent), development and growth 29%, skill acquisition (27 percent), Health (41 percent), immunization (32 percent) records of Building (55 %), clubs and associations (57 %). Private schools kept more data than public schools i.e. Health, Participation in school activities and club and association record.

Research Question 2: Is the availability and management of data affected by the type of school ownership?

From table 2, 80 to 99 percent of private public schools managed the following data accurately according to national norms, attendance register, weekly dairy of work, school time table, lesson note plan, subject syllabus and duty roster. More Public Schools manage the following data accurately than private schools. Teachers movement book (85%) teachers time book (88%) and staff records (77%). On subject class attendance for teachers, more private schools (81% adequately utilized the data than public schools with (74%).

Research Question 3: What are the impacts of accurate data management on the administration of secondary schools?

Table 1: Available data in secondary schools

S. No.	Type of Data	Public schools		Private schools		Total No. of schools with data	% Without data	%	Remarks
		Available No.	%	Not Available No.	%				
1	Attendance register	173	100	-	-	273	100	-	Available
2	Subject class teacher attendance	148	86	25	14	236	86	14	Available
3	Fees register	152	88	21	12	229	84	16	Available
4	Students report form	162	94	11	6	254	93	7	Available
5	Admission register	166	96	7	4	259	95	5	Available
6	Log book	162	94	11	6	252	92	8	Available
7	Visitors book	162	94	11	6	249	92	8	Available
8	Conduct book	133	77	40	23	203	74	26	Available
9	Weekly diary of work	166	96	7	4	262	96	11	Available
10	School time table	171	99	2	1	270	99	3	Available
11	Lesson note and plan	166	96	7	4	265	98	8	Available
12	Minutes of staff meetings	164	95	9	5	260	95	5	Available
13	Subject syllabus	157	91	16	9	251	92	8	Available
14	Academic per. Rec.	152	88	21	12	245	91	28	Available
15	Duty roster	159	92	14	8	247	90	10	Available
16	Dev./growth record	38	22	135	78	80	29	71	Not Available
17	Health records	51	30	122	70	111	41	59	Not Available
18	Immunization rec.	44	26	129	74	86	32	68	Not Available
19	Family history	84	49	89	51	124	45	55	Not Available
20	Participation in school activities	108	63	65	37	181	66	34	Not Available
21	Parents visit card	74	43	99	57	129	47	53	Not Available
22	Punishment record	134	78	39	22	214	78	22	Not Available
23	Skills acquisition	34	20	139	80	74	27	73	Not Available
24	Developmental milestones/devt	22	13	151	87	57	21	79	Not Available
25	Records of P.T.A contribution	131	76	42	24	208	76	24	Not Available
26	Games and sport records	150	87	23	13	238	87	13	Available
27	Past students rec.	155	90	18	10	245	90	10	Available
28	External exam. result analysis	164	95	9	5	255	93	18	Available
29	Records of building	103	60	70	40	150	55	45	Not Available
30	Staff records	153	89	20	11	237	87	13	Available
31	Impress account book	129	75	44	25	207	76	24	Available
32	Budget book	126	73	47	27	207	76	24	Available
33	Stock book inventory	143	83	30	17	203	82	18	Available
34	Cash book	136	79	37	21	213	78	22	Not Available
35	Clubs and association book	84	49	89	51	149	57	43	Not Available
36	Teachers movement book	164	95	9	5	254	93	7	Available
37	Teachers time book	159	92	14	8	239	87	13	Available
38	Transfer certificate	150	87	23	13	238	87	12	Available
39	Seniority list	157	91	16	9	238	87	14	Available
40	Monthly return	155	90	18	10	234	84	16	Available
41	Inspection report book	152	88	21	12	238	87	13	Available
42	P.T.A minutes book	157	91	16	9	244	89	11	Available
43	Committee report book(student)	102	59	71	41	170	52	48	Not Available
44	Committee report book(teacher)	129	75	44	25	202	74	26	Available
45	Donations by volunt. organization	93	54	80	46	160	59	41	Not Available
46	Records of donations by parents	126	73	47	27	200	73	27	Available
47	Student teachers record book	131	76	42	24	214	78	22	Available

Table 2: Management of available data in secondary schools.

S. No.	Public schools										Private Schools										Total				Remarks						
	AM					MOA					NAM					M					MOA					NAM					
	No.	%	No	%	No.	No.	%	No.	%	No.	No.	%	No.	%	No.	No.	%	No.	%	No.	No.	%	No.	%		No.	%				
1	173	100	-	-	-	-	-	98	98	2	2	-	-	-	271	99	2	1	-	23	13	-	-	-	-	AM					
2	110	74	26	18	12	8	71	81	6	7	11	12	16	181	78	32	23	9	-	42	23	-	-	-	AM						
3	75	49	47	31	30	20	44	57	21	27	12	12	16	119	53	68	24	23	-	23	17	-	-	-	MOA						
4	111	69	28	17	23	14	76	83	16	17	-	-	-	187	76	44	17	7	-	25	7	-	-	-	AM						
5	106	64	55	33	5	3	80	86	13	14	-	-	-	186	75	68	24	2	-	5	2	-	-	-	AM						
6	71	44	81	50	10	6	51	57	33	36	6	7	122	51	114	43	16	6	-	16	6	-	-	-	MOA						
7	73	45	84	52	5	3	46	53	38	44	3	3	119	44	122	48	8	8	-	8	8	-	-	-	NAM						
8	65	49	45	34	23	17	37	54	29	41	4	5	102	52	74	38	27	10	-	27	10	-	-	-	MOA						
9	146	88	13	8	7	4	91	95	5	5	-	-	-	237	92	18	6	2	-	7	2	-	-	-	AM						
10	156	91	15	9	-	-	91	92	8	8	-	-	-	247	92	23	8	-	-	-	-	-	-	-	AM						
11	163	98	3	2	-	-	81	90	18	10	-	-	-	244	95	21	5	-	-	-	-	-	-	-	AM						
12	98	60	59	36	7	4	60	63	32	33	4	4	158	62	91	35	11	3	-	3	3	-	-	-	MOA						
13	116	74	41	26	-	-	90	96	4	4	-	-	-	206	85	45	15	-	-	-	-	-	-	-	AM						
14	62	41	84	55	6	4	75	81	18	19	-	-	-	137	61	102	39	-	-	6	-	-	-	-	MOA						
15	119	75	26	16	14	9	84	96	4	4	-	-	-	203	86	30	10	4	-	14	4	-	-	-	AM						
16	10	25	11	30	17	45	2	4	32	76	8	-	20	12	22	43	45	25	33	33	-	-	-	-	NAM						
17	11	22	12	23	28	55	23	28	18	44	12	21	34	30	37	32	40	38	-	40	38	-	-	-	NAM						
18	9	21	12	27	23	52	12	28	18	44	12	28	21	25	30	27	35	48	-	35	48	-	-	-	NAM						
19	13	15	18	22	53	63	8	20	13	33	19	47	21	18	31	28	72	54	-	72	54	-	-	-	NAM						
20	35	32	37	35	36	33	27	37	27	37	19	26	62	35	64	35	55	30	-	55	30	-	-	-	NAM						
21	22	30	24	32	28	38	13	24	23	41	19	35	35	27	47	36	47	37	-	47	37	-	-	-	NAM						
22	53	40	67	50	14	10	28	35	32	40	20	25	81	38	99	44	34	18	-	34	18	-	-	-	NAM						
23	9	27	9	27	16	46	7	12	12	30	21	53	16	22	21	28	37	50	-	37	50	-	-	-	NAM						
24	5	24	4	16	13	60	13	36	7	7	21	15	43	18	30	11	18	52	-	28	52	-	-	-	NAM						
25	55	42	45	34	31	24	37	48	23	30	17	22	92	45	68	32	48	23	-	48	23	-	-	-	NAM						
26	90	60	47	31	13	9	46	52	36	41	6	7	136	56	83	36	19	8	-	19	8	-	-	-	MOA						
27	90	58	56	36	9	6	40	44	45	50	5	6	130	52	101	43	14	5	-	14	5	-	-	-	MOA						
28	69	42	69	42	26	16	39	43	42	46	10	11	108	43	111	44	36	17	-	36	17	-	-	-	NAM						
29	46	45	26	25	31	30	22	46	16	35	9	19	68	45	42	30	40	25	-	40	25	-	-	-	MOA						
30	77	50	50	33	26	17	50	59	28	33	6	8	127	55	78	33	32	12	-	32	12	-	-	-	MOA						
31	62	48	44	34	23	18	33	42	26	34	19	24	95	45	70	39	42	16	-	42	16	-	-	-	MOA						
32	32	25	73	58	21	17	36	45	35	43	10	12	68	35	108	50	31	15	-	31	15	-	-	-	MOA						
33	47	33	66	46	30	21	36	45	40	50	4	5	83	39	106	48	34	13	-	34	13	-	-	-	AM						
34	50	37	50	37	36	26	33	43	33	43	11	14	83	40	83	40	50	20	-	50	20	-	-	-	AM						
35	26	21	29	35	29	34	25	38	24	37	16	25	51	35	53	36	45	29	-	45	29	-	-	-	NAM						
36	139	85	80	11	6	4	55	61	31	34	4	5	194	73	49	22	11	5	-	11	5	-	-	-	AM						
37	140	88	16	10	3	2	51	64	18	23	11	13	191	76	34	16	16	8	-	16	8	-	-	-	AM						
38	98	65	49	33	3	3	2	46	52	29	33	15	144	59	68	33	16	8	-	16	8	-	-	-	MOA						
39	100	64	44	28	13	8	45	56	27	33	9	11	145	60	61	30	22	10	-	22	10	-	-	-	MOA						
40	121	78	26	17	8	5	37	47	23	29	19	24	158	62	49	23	27	15	-	27	15	-	-	-	MOA						
41	84	55	47	21	21	14	43	50	35	41	8	9	127	52	82	36	29	12	-	29	12	-	-	-	MOA						
42	101	64	50	22	6	4	42	48	38	44	7	8	143	56	88	38	13	6	-	13	6	-	-	-	MOA						
43	30	29	42	22	30	29	29	42	29	42	10	16	59	35	71	42	46	23	-	46	23	-	-	-	MOA						
44	59	46	57	24	13	10	30	41	33	45	10	14	89	43	90	44	23	13	-	23	13	-	-	-	MOA						
45	33	36	24	25	36	39	36	54	11	17	10	29	69	45	35	21	56	34	-	56	34	-	-	-	NAM						
46	42	33	29	29	35	28	29	39	26	35	19	26	71	36	75	37	37	27	-	37	27	-	-	-	MOA						
47	38	29	62	47	31	24	32	38	29	35	22	27	70	34	91	41	53	25	-	53	25	-	-	-	MOA						

Source: Field work.

Key: AM = Adequately managed. MOA: managed on the average NAM: Not adequately managed.

Principals and teachers in private and public secondary schools are aware and agreed that accurate data management could promote school administration. Hence 84% and above of the respondent agreed with the seven impact of accurate data management on school administration as revealed in table 3

Hypothesis One: There is no significant difference in the availability of data between

private and public secondary schools.

Hypothesis Two: There is no significant difference in the accurate management of available data between private and public secondary schools.

From table 5, Chi-square calculated is 26.69 greater than chi-square table value, 15.51. The result is significant at 0.05 and the null hypothesis is rejected. There is significant difference in the

Table 3: Impact of accurate data management on school administration

S. No.	Items	Agreed No.	%	Disagreed No.	%	Remark
1	Enhance decision marking	2860	96	119	4	Promote
2	Make accurate assessment of students academic performance and Behaviour	2800	94	179	6	Promote
3	Promote accurate assessment of teacher	2681	90	298	10	Promote
4	Promote effective inspection and supervision of instruction in schools	2502	84	477	16	Promote
5	Serves as legal documents, enables school heads provide accurate information to inspectors, parents and researchers.	2711	91	268	9	Promote
6	Make planning possible reliable, and facilities positive co-ordination and evaluation of programmes.	2770	93	209	7	promote
7	Provide accurate and reliable information for career guidance	2562	86	417	14	Promote

Source: Field work

Table 4: Chi-square contingency table showing number of schools with data.

% of the no. of data available in schools	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	Total
No of public schools	7 (4.4)	10 (6.3)	10 (3.8)	11 (10.8)	7 (7)	3 (4.4)	31 (36.1)	42 (45.6)	62 (54.4)	173
No of private schools	0 (2.6)	0 (3.7)	6 (2.2)	6 (6.2)	4 (4)	4 (2.6)	26 (20.6)	30 (26.4)	24 (31.5)	100
Total	7	10	6	17	11	7	57	72	86	273

Degree Freedom (df) = 8, χ^2 Cal = 26.89. critical at 0.05 = 15.51. significant at 0.05.

Table 5: Chi-square contingency table showing accurate management of data and schools.

% no. of data accurately managed schools	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	Total
No of public schools	0 (1.3)	7 (7)	32 (22.8)	21 (22.2)	35 (38.7)	15 (22.2)	24 (20.5)	14 (10.14)	12 (13.9)	13 (14.6)	173
No of private schools	2 (0.73)	4 (4)	4 (13.18)	14 (12.82)	26 (22.3)	20 (12.82)	8 (11.7)	2 (5.9)	10 (8.06)	10 (8.42)	100
Total	2	11	36	35	61	35	32	16	22	23	273

Table 6: Chi-square contingency table showing availability and management of data in schools

% no. of data accurate managed schools	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	Total
No. of public schools	0 (2)	10 (6.5)	13 (20)	11 (27.5)	11 (24.5)	9 (32)	17 (27.5)	46 (39.5)	76 (43.5)	80 (-51)	273
No. of private schools	2 (2)	3 (6.5)	27 (20)	44 (27.5)	38 (24.5)	55 (32)	38 (27.5)	33 (39.5)	11 (43.5)	22 (-51)	273
Total	2	13	40	55	49	64	55	79	102	87	546

accurate management of available data between private and public secondary schools in Delta State.

Hypothesis Three: There is no significant difference between availability and accurate management of data in secondary schools

From table 6, Chi-square calculated is 170.14, greater than chi-square table value, 15.51. The contingency coefficient is 0.514, an indication of positive relationship. The null hypothesis is rejected. Not all available data are accurately managed. There is a significant difference between availability and accurate management of data according to national norms in secondary schools in Delta State.

Hypothesis Four: There is no significant difference in the availability of data between urban and rural secondary schools.

From table 7, Chi-square calculated is 11.407, less than chi-square table value, 15.51. The result is not significant at 0.05 and the null hypothesis is accepted. There is no significant difference in the availability of data between urban and rural secondary schools in Delta State

Hypothesis Five: There is no significant difference among principals, teachers of private and public secondary school on the identified impact of accurate data management in the administration of secondary schools.

From table 8, since calculated F-value (0.0006316) is less than F critical value (2.60), the result is not significant and the null hypothesis is accepted at 0.05 level of significance. Principals and teachers in private and public schools identified the same impact of accurate data management in the administration of secondary schools, as revealed in table 3.

Hypotheses Six: There is no significant difference among, enhancement of decision making, make accurate assessment of students academic performance and behaviour, promote effective school supervision, serves as legal document, make planning possible and reliable, provide information for career guidance and promote accurate assessment of teachers as impacts, of accurate data management in the administration of secondary schools.

From table 9, calculated F value (0.0054) is less than F critical value (2.10) at 0.05 level of significance. The result is not significant and the null hypothesis is accepted. The seven identified impacts of accurate data management in the administration of secondary schools does not differ from each significantly. They contribute towards effective administration at equal degree, have the summation of their contribution results into an effective administration of secondary schools.

Table 7: Chi-square contingency table showing available data in urban and rural secondary schools.

% of the number of data available in schools	20-Nov	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	Total
No of Urban schools	(6) 10	(8) 10	(6.6) 7	(6.6) 6	(5.4) 5	(10.2) 9	(27.6) 29	(45.7) 39	(48.1) 49	164
No of Rural schools	(4) -	(5.2) 3	(4.4) 4	(4.4) 5	(3.6) 4	(6.8) 8	(18.4) 17	(30.3) 37	(31.9) 31	109
Total	10	13	11	11	9	17	46	76	80	273

Table 8: Summary of ANOVA showing the responses of principals teachers in private schools and principals/teachers in public secondary schools on the impact of accurate data management in the administration of secondary schools.

Sources of variance	Sum of squares (SS)	Df	Variance (MS)	F cal	F critical
Among	15	3	5		
Within	23,547,854	2975	7915.2	0.000632	2.60
Total	23,547,869	2978	7907		

Table 9: Summary of ANOVA showing the responses on the Seven identified impacts of accurate data management in the administration of secondary schools.

Sources of variance	Sum of squares (SS)	Df	Variance (MS)	F-cal	F-critical
Among	540	6	90		
Within	347,959,407	20846	166.92	0.0054	2.10
Total	347,959,947	20852	16687		

DISCUSSION

The findings of this study revealed attendance register, student report forms, admission register, log book, visitors books, lesson note and plan, minutes of staff meetings, subject syllabuses, past students' records, external examination result analysis, teachers movement book as the most common available data in secondary schools. These findings are consistent with those of Ogonor and Ojoh (1995), Nwadiani (1995).

On accurate data management the study revealed that the following data were managed according to national norms: attendance register, weekly diary of work school time table, lesson note and plan, subject syllabus and duty roster.

The location of school does not affect availability of data. An indication of equal knowledge of school data by both rural and urban school personnel. This does not agree with the findings of Ogonor and Ojoh (1995). There is a significant difference between private and public schools in the availability and accurate management of data as revealed in this study. Private schools kept more data than public schools. More public schools managed more data according to national norms than private schools.

There is a significant difference between availability and accurate management of data as revealed in this study. Only eleven (22%) out of the forty seven data are accurately managed by 70-99% of the schools.

On the impact of accurate data management, principals and teachers perceived that accurate data management could enhance effective administration in the following ways: Enhance decision making, make accurate assessment of students academic performance and behaviour, promote accurate assessment of teachers, promote effective inspection and supervision of instruction in schools. It also serves as legal documents which enable school heads provide accurate information to school inspectors parents, Guidance counselors and researchers. Make planning possible, reliable and facilitates positive co-ordination and evaluation of programmes. These findings are consistent with the views of (Ilori, 1995; Wade, 2001; Adeyemo et al., 1995; NCREL 2000).

There is no significant difference among principals/Teachers in public and principals/teachers of private secondary schools on the

identified impact of accurate data management in effective school administration. Similarly the seven identified impacts of accurate data management does not differ significantly from each other in promoting effective administration of secondary schools.

CONCLUSION AND RECOMMENDATIONS

Data available in ninety to hundred percent of the secondary schools are: attendance register, students report form, Admission Register, log book, visitors books weekly diary of work, school time-table lesson note and plan, minutes of staff meetings, subject syllabuses, external examination result analysis and past students record.

Data managed accurately according to national norms by eighty to ninety-nine percent of the schools are: attendance register, weekly diary of work, school time-table, lesson note and plan, subject syllabus and duty roster.

There is a difference in the availability and accurate management of data between private and public secondary schools. Private schools have more data i.e. (Health record and students participation in school activities). Public schools managed more data according to national norms than private schools. There is no significant difference in the availability of data between rural and urban schools.

Principals and teachers in both private and public schools identified seven impacts of accurate data management in the administration of school without variation in views (Table 3). The seven identified impacts does not vary from each other in their contribution towards effective administration of secondary schools.

Based on these findings, there is need for a continuous inspection of schools, to enhance the keeping and accurate management of data. Government and private school owners should organize seminar through Institute of Educations, Faculties of Education and Colleges of Education for teachers and principals on method of data management. Modern methods of keeping data the computer which are totally not available in all the schools should be provided and utilized effectively by teachers and principals.

REFERENCES

Adeniyi, S.A.: *Keeping of School Records*. Lagos:

- Conference of Primary School Head teachers of Nigeria (1989).
- Adeyemo, B., S. O. Adekoya and A. Oyediji. 1995. "Record Management in Schools", in E. T. Eheimetolor (ed.) *Data Management in Schools*. Benin: University of Benin.
- Fagbulu, A.M. and M. Duze. 1988. *Record Keeping for Teachers*. Ibadan: Evans Brothers Publishers.
- Feldman, Jay and Rosann Tung. 2001. "Using Data-Based Inquiry and Decision Making to Improve Instruction ERS Spectrum", (pp. 10-19) in H. Howard Wade, *Data Inquiry and Analysis for Educational Reform*. Eugene: Eric Clearing House on Educational Management.
- Holcomb, Edie L. 1999. *Getting Excited About Data. How to combine People passion and Proof*. Thousand Oaks California: Corwin Press.
- Ilori O. 1995. "Computerization of Data in Federal Unity Schools", in E. T. Eheimetolor (ed.) *Data Management in Schools and Other Issues*. Benin: University of Benin.
- Multi-Resources Associates Ltd. 1990. *Record Keeping as Instrument for Excellence*. Lagos: Ikeja.
- North Central Regional Educational Laboratory. 2000. *Using Data to bring About Positive Results in school improvement Efforts*. Illinois: Oakbrook.
- Nwadiani, Mon. 1994. "Managing Pupils attendance Data for Computerization." *Paper presented at the NERA/ Computerization of Educational Data Conference, University of Benin* 21-24, June.
- Nwagwu, N.A., E. T. Ehiamentolor, K. Ajayi, E. Arubayi and K. Gang (Eds.). 1991. *Training Manual on the Keeping of Six School Records*. Lagos: UNESCO/ Federal Ministry of Education Project.
- Nwagwu, N.A. 1995. "The Development and Management of records in the Nigerian Education System", in E. T. Ehiamentolor (ed.) *Data Management in Schools*. Benin: University of Benin.
- Ogonor B.O. and F. Ojoh. 1995. "A study of Record Management in Secondary schools in Ughelli North and south Local Government Areas", in E. T. Ehiamentolor (ed.) *Data Management in schools*. Benin: University of Benin.
- Wade, Howard H. 2001. *Data Inquiry and Analysis for Educational Reform*. Eugene: Eric Clearinghouse on Educational Management.