

Science teachers' participation in Nigerian School evaluation

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Abstract

The concern of this paper is to find out from the science teachers in Nigeria, their perception of the functionalism and their participation in the internal testing programme of Secondary Schools special reference to Rivers State. A sample of 1000 science teachers was randomly stratified from the entire teachers' population of 6,000 in Government-own Secondary Schools. The percentages and chi-square (χ^2) statistical tools were used. The three hypotheses of the study were accepted at an alpha level of 0.05. There was no statistically significant relationships found between the science teachers' perception of the internal testing programme in their schools and their participation in the whole exercises viz: their classroom instructional management functions; the guidance and counselling of their schools and the administration of their schools respectively. A suggestion for the training and re-training programmes of the science teachers in measurement and evaluation, principles practice methods and capability were preferred in the paper

Keywords: Population, re-training, measurement

Introduction

The importance and greatest regards often accorded the school system for sustainable development is often derived from the quality of the teachers. As a collorary it gives the quality of certificates the products of such school system came out with into the labour market. Thorndike and Hagen (1977), Ayrer and McNamara (1973), Ferguson and Maxey (1976) Tyler (1973) are all in support of the fact that any given school testing programme must meet some basic functional qualities so as to become useful. The direct functions of the secondary school testing programme are expected to be in at least three main areas that is viz: *Classroom, Guidance and Administration*, (Thorndike and Hagen 1977).

There are various testing types that operate in Nigerian secondary school system. The operation of (3 – 3) system of education creates room for entrance examination in public and private schools. There is also the state-wide conducted Junior West African Examination, and the Senior Secondary Certificate Examinations approved by National Policy on Education (2004-revised). These brands of examinations are always external to the secondary school system. Therefore, the teachers who teach the students have very minimal inputs into the setting, administration, grading and production of results for the use of schools, parents and government in decision making as it relates to the students.

The testing programme within the secondary schools where the teachers-made test items are administered on students is the basic concern of this study. The periodically administered examinations are usually constructed by experts in test, measurement and evaluation.

Psychometricians who are hardly found at the secondary school system know the expected qualities desired of any measuring instrument, viz: validity, reliability and practicality. These are the main qualities that the teachers in secondary schools, who are not quite good in the process of educational assessment, do not have (Anastasi, 1988). The teacher-made tests which are used to assess different sub-group of students internally can be said to be biased and not appropriate for arriving at the scores for proper conduct of these needed activities of the school system (Thorndike and Hagen 1977).

The science teachers that are used to giving tests from time to time to different classroom groups are expected to use the available standardised tests for the assessment of these classes in groups, depending on what information is sought, (Austin and Panos 1971). While there are many possible functions for such information, it is generally assumed that the fundamental purpose of any testing is to produce that relevant information, which can be, used in educational decision making, Thorndike and Hagen (1977), Austin and Panos (1969). The decisions that may be needed could be concerned with the continuation, termination or modification of an existing testing programme or with the development and possible adoption of some new programme (Austin and Panos, 1971).

The internal testing programme in Nigerian Secondary Schools outside the government administered tests is very germane to the students performance in the external examination in science subjects, Umoinyang (1996) and (Green 1980:11). The purposes, which any given test is expected to achieve are: instructional, diagnostic, selection, placement, classification and guidance (Thorndike 1982). The internal testing programme that is carried out by teachers, try very hard to achieve one or more of these purposes at each given time. When these are not taking place very well within the school testing programme, the teachers are the most qualified people to tell the story (i.e. the way it is). Hence, the teachers in the secondary school are the best qualified people to give the exact position of internal testing programme now in Nigerian schools. Their belief in the functionalism of the testing arrangement will make them to participate in it adequately.

Thorndike and Hagen (1977) had given a vivid graphic representation of what can be regarded as appropriate of the three purposes areas where the teachers internal testing activities can be identified as meeting the needs or otherwise of the State School testing programmes in Nigeria. The following Table 1, shows the functions of a testing programme. This no doubt will form the basic foundation

for identifying the functioning of the testing programme of Nigerian Secondary Schools in this study.

Table 1. Functions of a Testing Programme

Classroom Functions	Guidance Functions	Administrative Functions
Diagnosing learning difficulties	Preparing evidence to guide discussions with parents about their children	Assigning students to classroom groups
Evaluating discrepancies between potentials and achievement	Helping the students make immediate choices	Placing new students
Appraising gains or growth in achievement	Helping the students to set educational and vocational goals	Helping to determine eligibility for special groups
Grouping students for instruction within a class	Improving counsellor teacher, and parent understanding of problem cases	Evaluating curricula emphasis and curricular experiments
Planning instructional activities for an individual		Improving public relations
Identifying students who need special diagnostic study and remedial instruction		Providing information for outside agencies.
Determining reasonable achievement levels for each students		

Source: Planning a School Testing Program in Thorndike R. L. and Hagen E. P. Measurement and Evaluation in Psychology and Education (4e) John Wiley and Sons Inc. Canada Chapter (14)

The Problem

The testing programmes in Nigeria secondary school system is threatened every day by a myriad of problems of unqualified teachers who should teach students well. The dearth of measurement and evaluation experts is yet another one (Ward, 1980) and Shulman (1980). The science teachers may teach well, since they lack the expertise in testing what takes place in the classroom, with testing is a different thing altogether (Tittle, 1989).

It is accepted in psychometrics that the level of validity, reliability and practicality of some given class tests determine how students perform and the ability of the test to discriminate between the good and bad students. The level of consistency, of the discrimination between the students also shows the examiner/examinee coverage of content, curriculum richness and the extent of teaching done internally. The student's readiness for future performance in external examination is easily ascertained (Linn and Harnisch 1981, Nenty 1986).

In Rivers State for example, all the ever-identified forms of examination malpractice and cheating are

in vogue. Okoh (1996:98) identified some twelve areas as forms of examination malpractice thus:

1. Bringing in of prohibited materials (e.g. summary notebooks, textbooks, atlases, dictionaries calculators/ computers, etc) by candidates into the examination halls.
2. Candidates bringing into the examination room answers written on objects like a piece of paper rolled into ballpoint pen, a ruler, handkerchief, paper money, eraser, uniform, even on the thigh and other parts of their body (called ‘dubbing’ or tattoo)
3. Illegal exchange of information, written or verbal (e.g. copying or ‘giraffing’) among candidates inside the examination hall (e.g. through use of Walkie-talkie, drums, flutes and bio-codes’ such as coughing, sneezing and whistling) to help candidates answer objective-type papers.
4. Leakages of questions to students, intentionally or carelessly by a variety of person such as teachers, examination body personnel typists, etc. before examination
5. Smuggling in of, or replacement by already worked answer scripts inside or outside the examination hall, by candidates, supervisors, touts/contractors.
6. Turning a blind eye on obvious malpractice during examinations by supervisors and invigilators already bribed or compromised.
7. Subject teachers entering examination hall illegally and rendering assistance to their students, with the active connivance of school authorities, supervisors and invigilators.
8. Supervisors, starting before or later than schedule start-times.
9. Hooliganism or deliberately generating pandemonium in examination halls in order to create a chaotic atmosphere for cheating – some frightening cases of candidates being found with daggers, short guns, acid or other lethal weapons in examination halls have been reported.
10. Insults, threat and assaults by candidates (or their hirelings) of supervisors and invigilators who are perceived as “*unco-operative*” i.e. trying to obstruct cheating.
11. Impersonation of examinee by “mercenary” candidates (who may be fellow students, friends, hired assistants or contractors” even parents, etc.)
12. Certificate racketeering in the form of changes in, and/or issuance of false certificate or statement of results.

These are not the only ways that cheating and examination malpractice is carried out in Nigeria. New devices like the use of GSM cell phones are yet another device now used widely in public examinations. The situation became so serious that the Government of Rivers State had to intervene since 2001 to protect the name of the government from being dragged to the mud. Various pseudo invigilators and monitors are now on steady stand by at any given public examination centres. The war has not been won yet. These and other factors which concern the proper conduct and administration of public and private examination has propelled this researcher to investigate the science teachers perception of the functionalism of the internal examination system and their participation in our secondary schools in

Nigeria.

Given this scenario just presented, it is abundantly clear that only the secondary school teachers who are in the daily running of the school system are the best people in the system to give a clearer insight into the internal functioning of the testing programme in the schools.

Hypotheses

The following hypotheses are considered to be very relevant to find possible solutions to the problems of this study.

- There is no significant relationship between the science teachers' perception of the classroom management functioning of the secondary school internal testing and their participation in the operations of the testing programme of these secondary schools.
- There is no significant relationship between the science teacher's perception of the usefulness of the internal testing programme in the guidance and counselling activities of the students and their participation in the operation of the testing system of the secondary schools.
- There is no significant relationship between the perception of the science teachers on the functional uses of the testing programme on the administration needs of the schools and their participation in the operations of the school testing programme in the secondary schools.

Research Methods and Materials

The research of this nature that is State-wide is expected to involve many respondents (i.e. science teachers). The survey research method is very appropriate to do this type of study. The cross-sectional survey will involve the male and female teachers in Rivers State employment. The Rivers state Secondary school teachers' population is about 6,000 strong. These are those within the public service. The stratified random sampling method is adopted to arrive at a sample size of 1000 teachers made up of male 500 and female 500 in number.

These are trained science teachers that have spent nothing less than six to ten years in the teaching profession. These people have an age range of between (30 – 55) years. Experience in place of work usually accounts for a wholesome decision-making and implementation of professional policies and adherence to work ethics. (Meskouskas, 1976). These are therefore the calibre of teachers who can easily place in perspective the actual functioning of the internal testing programme in the secondary schools. They are fully part of the system that people are complaining about. Jatto (1996), Hassan (1987:213) notes that investigation carried out show that "classroom teachers lack the technical knowledge of how to design valid assessment instruments".

Also, Hassan (1987) remarked that "*a classroom science teachers generally write poor test items, and*

that a typical classroom teacher in the secondary school cannot construct good multiple choice items". These teachers definitely know about true functioning of the internal testing programmes for decision making in our different communities in Rivers State.

The appropriate instrument in this study is a rating scale named – TEACHERS’ PERCEPTION OF THE TESTING PROGRAMME FUNCTIONING RATING SCALE (TTPFRS). The instrument is made up of five sections. Section1 is made up of personal demographic variables of the teachers. The other four sections deals with various functional uses of the internal testing programme to classroom instruction decision making, guidance, and administrative activities. The last part is to find out the type of testing programme being employed by the teachers as was suggested by Thorndike and Hagen (1977).

Results and Discussion

The following tables (2 – 8) give the descriptive and inferential data analysis of the teachers’ perception of the internal testing programmes of Secondary Schools and their participation in the whole exercise. The percentage and ranking are used for Table (2 - 5) while the chi-square was used for Tables (6 – 8) respectively.

Table 2. Teachers’ Perception of the Classroom Functions of the Secondary School Testing Programmes in Rivers State

	Classroom Functions	Agree		Undecided		Disagree		Ranking the positive responses
		Res.	%	Res.	%	Res.	%	
1.	Diagnosing learning difficulties	647	64.7	142	14.2	211	21.1	4 th
2.	Evaluating discrepancies between potentials and achievement	710	71	98	9.8	192	19.2	2 nd
3.	Appraising gains or growth in achievement	825	82.5	43	4.3	132	13.2	1 st
4.	Grouping students for instruction within a class	416	41.6	125	12.5	460	46.0	5 th
5.	Planning instructional activities for an individual	200	20	150	15	650	65	7 th
6.	Identifying students who need special diagnostic study and remedial instruction	230	23	175	17.5	595	59.5	6 th
7.	Determining reasonable achievement levels for each students	700	70	140	14	160	16	3 rd

Table 2, examines the science teachers perception of the classroom functioning of the internal testing programme of the public schools in Rivers State. It is shown that the appraising gains or growth in achievement comes first in ranking among the teachers with 82.5% responses. Evaluating discrepancies

between potentials and achievement comes second in the ranking of the teachers' responses with 71% responses from teachers. The determination of a reasonable achievement level for each student comes third in the ranking of the teachers. This had a 70% of the teachers' responses to the internal classroom functions of the internal testing programmes of the public secondary schools in Rivers State. Occupying the fourth position, the teachers agree with 67.4% that diagnosing learning difficulties is one of the functions of the internal testing programme of the State.

Unfortunately, the use of internal testing programme for planning instructional activities for individuals, and identifying students who need special diagnostic study and remedial instructions are at the last ranking positions with 65% and 60% disagreement respectively. This is least expected from the teachers of this State. The situation tells so much on what the teachers are doing with the internal testing programme of the State.

Table 3. Teachers' Perception of Guidance Functions of the Internal Testing Programme of Secondary Schools in Rivers State

	Guidance and Counselling Functions	Agree		Undecided		Disagree		Ranking the positive responses
		Res.	%	Res.	%	Res.	%	
1	Preparing evidence to guide discussions with parents about their children	470	47	210	21	320	32	1 st
2	Helping the students make immediate choices	242	24.2	202	20.2	536	53.6	3 rd
3	Helping the students to set educational and vocational goals	300	30	211	21.1	489	48.9	2 nd
4	Improving counselor, teacher and parents understanding of problem cases	214	21.4	66	6.6	730	73	4 th

Table 3 gives the exact perception of the science teachers of the guidance functions of the internal testing programme of secondary schools in Rivers State. The first positive position shown on the table is that of 47% who agreed that they use the testing programme for preparing evidence to guide discussions with parents about their children. This is rather a low percentage to behold. The second positive position was where only 30% agreed to using the internal testing to help the students to set educational and vocational goals. In this particular case, some 21% and 49% are undecided and disagreed respectively.

The third item on this same table shows that only 24% agreed to using the internal testing programmes for helping the students to make immediate choices. For this same item, 20% are undecided while 54% disagreed. The fourth position of the ranking is where only 21% of the teachers agreed to using the internal testing programme for improving counsellors, teacher and parents understanding of problem cases. For this fourth positively rated item on the table, 73% disagreed ever using the internal testing

programme to improving the counsellor, teachers and parents understanding of the problem cases. Again, the picture painted by the perception of the teacher is equally very unfortunate for the future development of the testing programmes of the State.

Table 4. Teachers’ Perception of the Administrative Functions of the Internal Testing Programmes of the Secondary School in Rivers State

	Administrative Functions	Agree		Undecided		Disagree		Ranking the positive responses
		Res.	%	Res.	%	Res.	%	
1.	Assigning students to classroom groups	618	61.8	118	11.8	264	26.4	3 rd
2.	Placing new students	716	71.6	45	4.5	239	23.9	1 st
3.	Helping to determine eligibility for special group	216	21.6	112	11.2	672	67.2	5 th
4.	Evaluating curricula, curricular, emphasis, and curricular experiment	119	11.9	145	14.5	735	73.5	6 th
5.	Improving public relations	220	22	106	10.6	674	67.4	4 th
6.	Providing information for outside agencies	714	71	69	6.9	21.7	21.7	2 nd

Table 4 deals with the science teachers’ perception of the administrative functions of the state schools internal testing programme. The first position on the table is where 72% among the science teachers agreed to using the internal testing programme for placing new students. The second position is that where 71% agreed to using the internal testing programme for providing information for outside agencies. The third positions where 62% among the teachers agreed to using the internal testing arrangement to assigning students to classroom groups.

At the fourth position on the table, only 22% agreed to the use of internal testing programmes for improving public relations of their schools. At this fourth position of the ranking 67% disagreed ever using the internal testing of their school to improve public relations of their schools.

The fifth and sixth positions show that only 22% and 12% respectively agreed that they use their internal testing programmes for helping to determine eligibility to special groups and evaluating curricula and curricular experiments. At the same fifth and sixth positions, 67 and 74% disagreed to using the internal testing programme for such purposes in their schools. This is quite revealing a position to note in this

type of research endeavour.

Table 5. Teachers' Perception of Available Secondary School Internal Testing Programme for Students as they Progress to Colleges and Colleges of Education

	Tested Areas	Agree		Undecided		Disagree		Ranking the positive responses
		Res.	%	Res.	%	Res.	%	
1.	Scholastic Aptitude Testing (Test of verbal and non verbal abilities to nurture the students for College or Vocational learner	116	11.6	211	21	673	67	7th
2.	Reading test (Availability of a development or remedial reading program develops students reading skills).	120	12	200	20	680	68	5th
3.	Test of special aptitude (the Students are usually counselled when given appraisal with specialised aptitudes as well as general scholastics aptitude	118	11.8	140	14	742	74	6th
4.	Achievement test in content areas: The use of standardised achievement tests in content areas helps students make decisions about future education plans	811	81	20	2	169	16.9	1st
5.	Interests: Some interest of students about their future career can be reached in the secondary schools when these tests are involved	213	21	90	9	697	69.7	4th
6.	Prognostic tests; these are tests that are concentrated on chosen subjects like Maths and Language which are tested repeatedly	715	71.5	44	4	241	24	2nd

7.	Personality and adjustment inventories (Trained counsellors/psychologists can use these inventories to study students and place them in choice areas in university education. This is started in the secondary schools before the high school education	311	31	70	7	619	62	3rd
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Table 5 parades some testing programmes from which the students can benefit from maximally when available. The first position is that where 81% of the science teachers agreed that achievement test in content areas are available to their students internally. At the second position, 72% of the teachers agreed that prognostic tests are available for the use of the students in their schools.

At the third position is where only 31% of the science teachers agreed to the availability of personality and adjustment inventories in their schools. At this third position, some 62% disagreed. The fourth and fifth position only 21 and 12% agreed to the availability of “*interest*” and “*Reading test*” batteries in their school. At these fourth and fifth positions 70 and 68% disagreed.

The responses at sixth and seventh positions show that only 11.8 and 11.6 agreed to the availability of test of special aptitude and scholastic aptitude test in their schools for use. At these last positions 74 and 67% disagreed respectively. The disagreement with the availability of these internal testing arrangements has shown the hollowness in the internal testing arrangement of the public school in Rivers State

Testing of Hypotheses

The three hypotheses of the study are analysed as follows, using the chi-square (X^2) statistical tools.

Table 6. Chi-square (X^2) test of Teachers’ Perception of Classroom functions of Secondary School Testing Programme in Rivers State

	Classroom Functions	N = 1000	Agree		Un-decided		Dis-agreed		Column Total	(O) – E) ² E
			O	E	O	E	O	E		
1	Diagnosing learning difficulties	O E	647 (0.46) 533	142 (.018) 125	211 (0.148) 343	1000	0.59			
2	Evaluating discrepancies between potentials and achievement	O E	710 (.110) 533	98 (-0.098) 125	192 (.194) 343	1000	0.257			

3	Appraising gains or growth in achievement	0 E	825 (.300) 533	43 (.430) 125	132 (.378) 343	1000	1.108
4	Grouping students for instruction within a class	0 E	416 (.048) 533	125 (0) 125	459 (.114) 343	1000	0.162
5	Planning instructional activities for an individual	0 E	200 (.390) 533	150 (0.4) 125	650 (.801) 343	1000	1.231
6	Identifying students who need special diagnostic study and remedial instruction	0 E	230 (.323) 533	175 (.16) 125	595 (.51) 343	1000	0.993
7	Determining reasonable achievement levels for each students	0 E	700 (.098) 533	140 (0.114) 125	160 (.285) 343	1000	0.527
	Row Total		3728	873	2399	7000	
	Grand total					($\chi^2 =$	4.868)

$$df. = (r - 1) (c - 1) = (7 - 1) (3 - 1) = 6 \times 2 = 12$$

The calculated χ^2 is 4.868 while the critical value at df. 12 is 21.026. Since the critical value is higher than the calculated χ^2 of 4.868, then the hypothesis one is accepted. The hypothesis – There is no significant relationship between the teachers' perception of the classroom management functions of the secondary schools internal testing and their participation in the operations of the testing programme of this system is accepted. The alternative to this hypothesis is thus rejected. This is saying that the teachers knew little or nothing about the importance of the internal testing programme of the secondary school to the management of the teaching and learning programme of the system.

Table 7. Chi-square (χ^2) test of Teachers' Perception of Guidance Functions of the Internal Testing Programme of Secondary School in Rivers State

	Guidance Functions	N = 1000	Agree		Un-decided		Dis-agreed		Column Total	$\frac{(O - E)^2}{E}$
			O	E	O	E	O	E		
1	Preparing evidence to guide discussions with parents about their children	0 E	470 (0.281)	307	210 (0.49)	172	320 (0.148)	520	1000	0.478

2	Helping the students make immediate choices	0 E	242 (0.045) 307	202 (.0304) 172	536 (.0009) 520	1000	0.0763
3	Helping the students to set educational and vocational goals	0 E	300 (.00052) 307	211 (.051) 172	489 (.0036) 520	1000	0.0551
4	Improving counselor, teacher and parents understanding of problem cases	0 E	214 (0.092) 307	66 (0.93) 172	730 (0.163) 520	1000	1.185
Row Total			1226	689	2079	4000	
Grand total						($x^2 =$	1.7949)

$$df. = (r - 1)(c - 1) = (4 - 1)(3 - 1) = 3 \times 2 = 6$$

Critical x^2 – value - 12.592

The chi-square (x^2) of 1.794 @ α level of 0.05 and at df. of 6 is grossly smaller than the critical table value of 12.592. The null hypothesis is therefore accepted, because it is not statistically significant. The null hypothesis that states – There is no significant relationship between the teachers’ perception of the usefulness of the internal testing programme in the guidance and counselling activities of the students and their participation in the operation of the testing system of the secondary school is accepted. This actually portrays the teachers in these schools as those who know very little to nothing about the importance of the school internal testing programme.

Table 8. Chi-square (X^2) test of Teachers’ Perception of the Administrative functions of the internal testing programmes of the Secondary School Testing Programme in Rivers State

	Administrative Functions	N = 1000	Agree		Un-decided		Dis-agreed		Column Total	$\frac{(O - E)^2}{E}$
			O	E	O	E	O	E		
1	Assigning students to classroom groups	0 E	618 (.179) 434	118 (.037) 99	264 (.0189) 467	1000	0.408			
2	Placing new students	0 E	716 (.422) 434	45 (0.298) 99	239 (.238) 467	1000	0.958			
3	Helping to determine eligibility for special group	0 E	216 (0.252) 434	112 (0.0172) 99	672 (0.193) 467	1000	0.462			

4	Evaluating curricula, curricular, emphasis, and curricular experiment	0 E	119 (0.527) 434	145 (0.216) 99	735 (0.329) 467	1000	1.072
5	Improving public relations	0 E	220 (0.243) 434	106 (0.0049) 99	674 (0.196) 467	1000	0.444
6	Providing information for outside agencies	0 E	714 (0.416) 434	69 (0.0918) 99	217 (0.287) 467	1000	0.799
	Row Total		2603	595	2801	6000	
	Grand total					($\chi^2 =$	4.143)

$$df = (r - 1)(c - 1) = (6 - 1)(3 - 1) = 5 \times 2 = 10$$

The $\chi^2 = 4.143$. Critical table value 18.307

The chi-square of 4.143 @ 0.05 alpha level at degree of freedom of 10 is smaller than the table value of 18.307. Therefore, the null hypothesis three that states – there is no significant relationship between the perception of the teachers on the functional uses of the internal testing programmes on the administrative needs of the schools and their participation in the operations of the school testing programme in secondary school is accepted. This is because the χ^2 of 4.143 was not significant. Again, this exposes the science teachers in the school system in Rivers State that seem not to actually appreciate the importance of the school testing programme to the students under their tutelage.

One of the prescriptions of Thorndike and Hagen (1977) was that any useful and functional internal testing programme must provide – classroom functions. The analysis of research question one shows that there are more in the areas of appraising gains or growth in achievement, and evaluating discrepancies between potentials achievement, which ranked first and second on the table. The use of internal testing programme for “grouping students for instruction within a class”, “identifying students who need special diagnostic study and remedial instruction” and “planning instructional activities for an individual”, came up in the ranking as 5th, 6th and 7th respectively.

Here the hypothesis one was accepted as there was no statistically significant relationship found between their perception and their actual participation in the practice of the internal testing programme of the schools. This finding confirms the findings of (Ward, 1980) and (Shulman, 1980) who stressed on the dearth of measurement and evaluation experts in the schools nowadays. Tittle (1989) assertion also supported these teachers' dismal perception of the classroom functionalism of the internal school testing programmes. This position of the teachers' perception and participation may have accounted for the countless incidences of cheating and examination malpractices in Rivers State. The State was at a stage ranking higher than any other State in the Federation in cheating and malpractices in public examinations.

An examination of the science teachers perception of the guidance and counselling functions of the school internal testing programme of the schools and their participation in the entire programme shows that the teachers were more concerned with (1) “preparing evidence to guide discussions with parents about their children”, with a very small percentage as small as 47. The second position ranking was “helping the students to get educational and vocational goals”. Unfortunately, the science teachers do not perceive that the internal testing programme could be used for “helping the student to make immediate choices” by 54% of them. This is at variance with what Thorndike and Hagen (1977) recommended. Also, 73% of the teacher disagreed that the internal testing programme is necessary for improving counsellor, teachers and parents understanding of problem cases”. The second hypothesis was also accepted. This shows that the teachers know very little to nothing on the functionalism of the internal testing programme. This must have accounted for why these teachers do not participate effectively in the internal testing programme. The remarks of Hussan (1987) that some classroom science teachers are generally poor test item writer are fully indicated in this part.

The responses of the classroom science teacher to the administrative functionalism of the internal testing programme were not completely better. They perceive that it could be used for placing new students, and providing information for outside agencies and assigning students to classroom groups. Unfortunately, 67% of the teachers disagree that internal testing programme could be used for “improving public relation” and “helping to determine eligibility for special groups” respectively.

Again, 74% disagree that the internal testing programme can be used for “evaluating curricula, curricular emphasis and curricular experiments. The hypotheses in this area were also accepted. This is a clear indication that the teachers grossly lack the knowledge of the internal testing programme and that of measurement and evaluation in general. There is no wonder why the issue of examination malpractice and cheating is so rampant in the State examination system at the secondary school levels.

The provision of professional testing instruments and programme to measure students’ progress and growth are grossly inadequate. In some schools there is nothing in place to help the growth and development of the students from the teachers, as they progress from one level to another.

Recommendations

This study has clearly revealed that the classroom science teachers in Rivers State have a partial knowledge of the functionality of the internal testing programme of the school system. It has also accounted for their poor involvement in the proper development of the internal testing programme.

It is therefore, recommended that the State should start a training or re-training programme for all cadres of teachers in the secondary schools. This is to enable the teachers to have full fledged knowledge of measurement and evaluation in schools, particularly internal testing arrangement within the school(s).

Some periodic visitation of school by measurement and evaluation experts to carry out supervision of instruction is highly recommended for the schools. So much can be attained in these schools system when these type of suggested programmes are mounted to teach teachers on the classroom functions of

the internal testing programme of the school(s), their need to adequately participate in such programmes will assist in the development of the entire school system.

The importance of the internal testing programmes to the proper guidance and counselling of the students cannot be over-stressed. Some guidance and counselling experts as well as psychometricians of note are needed to demonstrate to the teachers the importance of getting involved in the guidance and counselling functions of the schools using internal evaluation outcomes of experts in the fields in question.

According to the recommendations of Thorndike and Hagen (1977) the internal testing programme must be made to provide for the administrative functions of the school. Teachers no doubt will also need special training in these areas. When these recommendations are adequately implemented, the cheating and examination malpractice now prevalent in our educational system must have been adequately minimised to a great extent.

Conclusion

The science teachers in Rivers State do not have a high perception of the internal testing programme of the secondary school system. To some, they hardly believe in the functionality of the arrangement. This situation has partly accounted why they hardly participate seriously in the internal testing arrangement in the schools. It was also concluded that their lack of expertise in the production of valid and reliable test items in their schools may have accounted for the lukewarm attitudes to the internal-testing programme of the schools. The observation of early researchers that the incidences of malpractices and cheating in public examination in the state may have resulted due to their poor perception of the internal testing programme of their school system, can now be easily confirmed from this study.

Finally, the study is of the strong conviction that the involvement of the teachers in the training and re-training programmes in the development of measurement and evaluation capabilities will solve these problems occasioned by the poor perceptions of the teachers of the internal testing programmes of the secondary school system in the Niger Delta region of Nigeria.

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