CURRICULUM INTERESTS OF SECONDARY SCHOOL STUDENTS,

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Project Adviser



Staff Evaluator

To My Dear Wife

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In Secondary Schools, many subjects are taught. The subjects offered in many schools range up to fourteen or more. But students are required to pass at least six subjects to obtain the west Vfrican 3chool Certificate. However, each student is allowed to choose a maximum of eicht subjects; but those offering additional Mathematics are allowed to offor up to nine Subjects.

Sometimes some s-tudonta offor a minimum, of six subjects, when one looks into the subjects offered in a single school by various students one finds wide difference. in their choices. This fact becomes more pronounced when one takes account of the variety of subjecta offered by students from, different schools. This creates a problem situation whereby an interested educator is forced to inquire for the reasons why students make the choices of subjects they offer.

The objectives of this investigation were therefore:

(1) To find out the popularity 3tatus of each subject offered in Secondary /schools.

(2) To find out the reasons why students tend to like or dislike individual subjects offered in School.

(3) To suggest measures that could be taken to improve the interests of students towards school subjects.

Specifically this study was meant to answer the following questions:

(1) What subject or subjects are most liked by the students?

(2) What subject or subjects are most disliked by the students?

(3) What are the factors which influence students* interests in making the choices of subjects they offer?

To make this study more meaningful, the following assumptions were made:

(1) That secondary School students while in school think of what professions they would pursue on completing the secondary education. The profession or career a student chooses will invariably affect his interest in making choices of subjects to offer in the West African School Certificate Examinations.

(2) Educationists contend that any subject could be taught at any level in a way that could be meaningful to the learner and therefore interesting to him. If a teacher lacks good methods of teaching he is likely to kill the interests of the students because he would not be capable of challenging them and thus arousing their interests. The researcher, thus, assumed that teachers' method of teaching plays a great role in the choice of subjects that students offer in the West African School Certificate Examinations.

(3) Positive reinforoement enhances interest in any human endeavour. When a student constantly scores high marks in certain subjects, he feels a sense of honour, reward and security. The reverse would be the case where a student constantly scores low marks in certain subjects. It is therefore likely that marks students obtain in various subjects might affect their choices of subjects to offer in the West African School Certificate Examinations.

(4) Often people dislike any task when they find it difficult to tackle and look for easier ones. It is likely that students, like most human beings, might behave in the same way in making choces of subjects to offer in the West African School Certificate Examinations.

As a guide to this investigation, the hypotheses below stated in null form were advanced to test the relationships of the variables under study.

(1) No relationship exists between the vocational value of subjects and students[1] interest in school subjects.

(2) No relationship exists between teachers[1] method of presentation or teaching and students[1] interest in school subjects,

(3) No relationship exists between marks obtained in school subjects and students[1] interest in school subjects.

(4) No relationship exists between the difficulty of subjects and students* interest in School subjects.

The idea here was to see the degree to which the independent variables, the vocational value of subjects, teachers' method of presentation, marks obtained in school subjects and the difficulty of subjects affect the dependent variable - students' interest in school subjects.

After analysing the data and testing the hypotheses, it was found that English language, Bible knowledge and Biology were the most popular subjects among boys and girls. The most disliked subjects were French, Igbo and G-eography, History also was not popular among the students.

It was also found that the vocational value of a subject was the strongest factor that affectr students' choico of subjects to offer in the West African School Certificate Examinations. This was followed by the difficulty of a subject. This factor was almost as strong as the first. Lastly marks obtained in school subject was another factor that affects students[1] choice of subjects to offer. Statistically no relationship was found to exist between teachers[1] method of presentation or

teaching and students[1] interest in school subjects and hence "he choice of stibjects they offer in the West African Hchool Certificate Examinations.

When the responses of boys and girls were treated separately the findings took another dimension.

For boys only, the vocational value and the difficulty of a subject were the only factors that were found to affect their choice of subjects to offer in the West African Examinations and these factors were really very strong among them.

For the girls only the foremost reason for liking & Subject was whether they received high marks in it, or whether it is easy and interesting (Table XI, P. 55.). Other reasons for liking a subject were the vocational value of a subject and teachers' method of presentation or teaching. For the girls the vocational value of a subject was not as strong a factor in the choice of subjects they make as it was for the boys.

In the light of the above findings the following recommendations are made:

(i) Some considerations might be given to the possibility of core curriculum based on English language, Bible knowledge (or religious knowledge) and Biology. From the point of view of National economy as well as children's interest, rather more emphasis should be placed on Biology. The interests of children in biological life around them should be exploited to the full from as early an age as possible. Furthermore, this natural interest in Biology can be used as a foundation work in language. If every biology teacher can also look upon himself as a teacher of English and if every teacher of English can acquire some local biological knowledge, which he can utilize in his English lessons, then something whould be gained from the point of view of making the Secondary School course more meaningful than it is at the present.

(2) Much of what is taught in History and Geography should be oriented towards the students[1] immediate environment. This is where it becomes necessary to emphasize the introduction of Social studies into Nigeria School|'starting from the primary school level.

(3) The popularity of Biology due to its immediate functional application to life around the -'tudents makes a good argument for integrated Science incorporating Physics find Chemistry.

(4) If we are committed to the principle of child centred education, surely teachers should take account in their methods of presentation, and the comments made by the students themselves. Individualized instruction is very important to enhance the interests of students towards school subjects. Teachers should set tasks that are within the ability of the children to tackle.

(5) Guidance services should be established in our Secondary Schools.

(6) Igbo and other Nigerian languages should be introduced into the Nigerian Universities and studied up to decree level in order to turn out qualified teachers in our active languages.

(7) Teachers should show interest in the subjects they teach and the welfare of their students.

(8) Teacher - student planning should be adopted as much as possible.

CHAPTER I

THE PROBLEM

Introduction

The Secondary School years which coincide with the adolescent period, are a time of extraordinary growth and development in the life of the youngster. The youngster increases tremenduously in size and weight.

> Such dynamically expanding and changing organism would be expected to have strong and changing wants and desires[1]

Psychologists stress the extent and variety of individual differences between youngsters of a given age, in physique and abilities and also in the rate of growth. Analogous differences might be expected in the variety of interests and at the time at which they appear. Various conditions and circumstances of life have been found to have important relationships with abilities, physique and also to affect them; presumably, this might be even more true of interests.

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[1] Sidney L. Pressey et al., Psychology in Education. New York: Harper and Row Publishers, 1959, p. 86.

A teacher's success often depends primarily on the extent to which she can make what her pupils are expected to do in School appeal to their interests which are changing, diverse and variously influenced. It is likely that some schools have not recognized their potentialities in the development of interests.

Most educators today seem convinced that students usually learn more efficiently when they like their classwork than when they dislike it. That is, pupil who enjoys the subject matter and the classroom climate will, in general, work more willingly to succeed in the class.

Hence, it appears desirable for teachers to discover what their pupils like and dislike about school and school subjects so that measures may be taken to support the appropriate likes and to correct undesirable dislikes in ways that will carry pupils more surely toward the school's goals.

SIGNIFICANCE OF THE INVESTIGATION

Interests have been described as one of the main aspects of learning situations, interests are the motivators of learning, without them, very little learning takes place in many individuals. Children are no different from adults in having strong likes and dislikes about many activities. A knowledge of those likes and dislikes and indifferences on the part of the teacher, and perhaps, on awareness of thm also by the students, have a lot to do with whether or not any learning takes place in a classroom.

Almost every teacher has had in class the very bright student who does not work and either manages to just get by or fails. From the point of view of these students' there is little going on in school to interest them.

Interests are also of the utmost importance in educational and vocational counseling. When dealing with the adolescent student, we find that a knowledge of his abilities is only a part of the picture when it comes

to making future educational and vocational plans. A secondary school student may have high academic ability and the proper background courses to study engineering successfully in the University. However, some students with such qualifications do not always succeed. The student's interest must be considered. Does he really want to be an engineer or is this vocational plan merely the hope of a parent frustrated in his own desires? A study of the boy's interests soon reveals what the real picture is.

Furthermore, in any Scheme for raising the intellectual performance of pupils by the use of improved teaching techniques or for modifying the existing syllabuses and examination requirements in West Africa, it is necessary to take into account the children's interests and motivations. As said earlier in this chapter, interest is so important in all human behaviour that without it real progress is not quite possible. It is mainly because interest is so rooted in the instinctive drives of man that it lends much vigour to all his activities.

Whether or not a student appears bright, interests is the teacher's main concern and the best results are achieved when he investigates the nature of the child's present experiences and interests and makes these the starting point of his lessons. One way of finding out the interests of children is to ask them about their likes and dislikes concerning the various subjects of school curriculum.

PURPOSE OF THE INVESTIGATION

The researcher aims:

(1) To find out the popularity status of each subject offered in secondary schools.

(2) To find out the reasons why students tend to like or dislike individual subjects offered in school.

(3) To suggest measures that could be taken to improve the interests of students towards school subjects.

STATEMENT OF THE PROBLEM

In secondary schools many subjects are taught. The subjects offered in many schools range up to fourteen or even more. But students are expected to pass at least six subjects to obtain the West African School Certificate.

Conventionally, each student is allowed to choose a maximum of eight subjects; and for those offering additional mathematics, they are allowed to offer up to nine subjects. Sometimes, some students can only offer the minimum of six subjects. When one takes a look at the subjects offered in a particular school by various students one finds wide differences in their choices. This fact becomes more pronounced and glaring when one takes account of the variety of subjects offered by students from different schools. This creates a problem situation whereby an interested educator is forced to inquire for the reasons why students make choices of the subjects they offer.

The problem has been broken down to answer the following specific questions:

(1) What subject or subjects are most liked by the students?

(2) What subject or subjects are most disliked by the students?

(3) What are the factors which influence students' interests in making the choices of subjects they offer?

BASIC ASSUMPTIONS:

To give substance and value to this study the following assumptions which may serve as guides in the search for meaningful variables were made:

(1) That secondary school students while in school think of what profession they would pursue on completing secondary education. The profession or career a student chooses will invariably affect his interest in making choices of subjects to offer in the school certificate examinations.

(2) Educationist contend that any subject could be taught at any level in a way that could be meaningful to the learner and therefore interesting to him. If a teacher lacks good methods of teaching he is likely to kill the interests of the students because he would not be capable of challenging them and thus arousing their interests. The researcher therefore assumes that teacher's method of teaching plays a great role in the choices of subjects that students offer in the West African Examinations.

(3) Positive reinforcement enhances interest in any human endeavour. When a student constantly scores high marks in certain subjects he feels a sense of honour, reward, and security. The reverse would be the case where a student constantly scores low marks in certain subjects. It is therefore likely that the marks students obtain in the various subjects might affect their choice of subjects to offer in the West African Examinations.

(4) Often people dislike any task when they find it difficult to tackle and look for easier ones. It is likely that students, like most human beings, might behave in the same way in making choices of subjects to offer in the West African Examinations.

HYPOTHESES

The following hypotheses which are stated in Null form are advanced to test the relationships of the variables under study:

(1) No relationship exists between the vocational value of subjects and students' interest in school subjects.

(2) No relationship exists between teachers' method of presentation and students' interest in school subjects.

(3) No relationship exists between marks obtained in school subjects and students' interest in school subjects.

(4) No relationship exists between the difficulty of subjects and students' interest in school subjects.

DEFINITION OF TERMS

Curriculum : Constitutively defined,

> Curriculum encompasses all learning opportunities provided by the school ... In another sense, the curriculum of an individual pupil includes the learning opportunities he actually selects and experiences[2]

Interest is

> A characteristic disposition organised through experience which impels an individual to seek out particular objects, activities, understanding, skills or goals for attention or acquisition.[3]

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[2]J. G. Saylor and Alexander, Curriculum Planning for Modern Schools. New York: Holt, Rine Heart and Winston Inc., 1966, p. 5.

[3]Jacob, W. tzel "The Nature of Reading interests: Psychological Aspects." Developing Permanent Interest in Reading, Supplimentary educational Monographs, No. 84, University of Chicago Press, Chicago, 1956, p. 7.

CURRICULUM INTEREST: For the purpose of this work, curriculum interest refers to the tendency on the part of students to like or dislike individual subjects offered in school.

INTRINSIC VALUE: This term is used here to mean inherent utility of a subject.

POPULARITY INDEX: In this work this term is used to mean an indicator of the amount of popularity a subject or teacher enjoys according to the opinions of the students

SECONDARY SCHOOL: As used here refers to only secondary grammar schools.

CHAPTER II

RESEARCH METHODOLOGY

SAMPLING PROCEDURE

Two secondary schools in Owerri divisions of East Central State of Nigeria were selected for the study. Since this investigation is intended to study the interests of students regarding the subjects offered in school, the investigator assumed that the interests of boys and girls might differ owing to sex differences and the consequent role expectations of each sex in the society. Hence a boys' college and a girls' college were chosen for the study.

Eighty boys from a boys' secondary school in Owerri and thirty girls from a girls' secondary school, in the same division were randomly selected. In each college, the subjects of the study were class III students only. This class was chosen following the information from the school teachers that it is at the end of year three that students normally choose what subjects to offer in the School Certificate Examinations.

In the boys' secondary school the subjects for the research were obtained by the investigator, with the co-operation of the principal of the school and a school teacher, by using the school register and choosing the names with odd numbers until eighty students were selected.

In the girls' secondary school the same process was used to select thirty students for the study.

The investigator selected eighty boys and thirty girls to reflect the proportion of boys and girls in secondary schools in the East Central State of Nigeria.

INSTRUMENTS USED

Emperical data regarding the above problem statements were collected through questionnaires disributed to the students. The questionnaires were administered by the investigator himself.

Again, class teachers were interviewed to ensure that appropriate subjects were used for the study.

METHODS OF SCORING

A varied number of subjects offered in secondary schools were included in the questionnaire and two categories of responses were required of the respondents, "like" and "don't like". Each respondent was required to indicate with a tick (✓) which subjects he likesor does not like.

Thus, if for example a respondent likes History, then he was required to put a tick (✓) under "Like" against History, if he does not like it he was required to put a tick (✓) under "Don't like". Only one tick was to be made against any one subject.

Thus, the popularity index of a subject was collected by subtracting the number of students who said they dislike it (subject) from the number who said they like it and dividing the difference by the total number of respondents. The maximum popularity index possible is thus 1 (one) and the possible range is - 1 to + 1.

To test the null hypotheses that: (a) No relationship exists between the vocational value of subjects and students' interest in school subjects; (b) No relationship exists between teachers' method of presentation or teaching and students' interest in school subjects (c) No relationship exists between marks obtained in subjects and students' interest in school subjects, (d) No relationship exists between the difficulty of subjects and students' interest in school subjects, two categories of responses "Yes" or "No" were offered and a respondent was required to check one of the categories against each factor under study.

For statistical analysis and interpretations Z test of significance was used to test the results obtained for each sex and for both sexes combined. The researcher has chosen two levels of confidence for this study. These are .01 and .05 levels of confidence. When Z is less or equal to .01, the investigator regards it to be significant at .01 level of confidence and when Z is above .01 or equal to .05 the researcher regards it as being significant at .05 level of confidence.

When Z is equal to .01 the investigator interpretes it to mean that there is a very strong significant relationship between two or more variables under study and when Z is equal to .05, the researcher interpretes it to mean that there is a significant relationship between two or more variables under study.

To further establish the reasons that could account for the choices the students make, the investigator required each respondent to give the most recent marks obtained in each subject. Moreover the respondents were asked to give the names of their favourite teachers, most effective teachers and the subject/subjects taught by each one. This was necessary to establish the relationships between liking a subject and liking the teacher and vice versa.

Furthermore it would enable the investigator to establish the relationship between marks obtained in a particular subject, liking the subject and liking the subject teacher.

Each respondent was asked to select his/her most favourite two subjects and give three reasons why he/she likes them. This is intended to enable the investigator to find out what factors really account for the choices the students make with regard to the subjects they offer in the West African School Certificate Examinations.

Finally the researcher intends to find out the rank order correlation between subject popularity statuses of boys and girls.

SCOPE AND DELIMITATION

Owing to limited time and resources this research was not carried to such a capacity that would easily lead to a more generalised conclusion. As mentioned earlier in this chapter the research was only limited to two schools in Owerri divisions of East Central State of Nigeria and 110 students were randomly selected for the study. The research was limited to only four variables as mentioned in the hypotheses, namely relationship between:

(a) The vocational value of subjects and students' interest in school subjects.,

(b) Teachers' presentation or method of teaching and students' interest in school subjects,

(c) Marks obtained in subjects and students' interests in school subjects and

(d) The difficulty of subjects and students' interest in school subjects;

Which affect the motivation of students in learning. It would seek to discover the attitude of students towards various school subjects. It is the intension of the researcher to make a major diagnosis of why certain school subjects enjoy extra-ordinary popularity while others do not, with the hope of recommending measures that might be taken to support the appropriate attitudes and to correct undesirable ones in ways that would surely enhance interest in school subjects and school work in general.

LIMITATIONS TO RELIABILITY AND VALIDITY OF DATA

In spite of the fact that the investigator explained that the aim of the research was not to find out who would be suitable for promotion to the next class, students tended to exaggerate their marks in answer

to the section that required them to give the most recent marks obtained in each subject under study.

Again in spite of the assurance given to the students that their responses were highly confidential and anonymous some thought that their responses would be made available to their teachers and therefore marked all the teachers on the staff as their favourite and most effective teachers. It is worth mentioning here that the respondents were not asked to write their names in the questionnaires.

In the girls' secondary school, Home Management which is one of the subjects offered in the school was not originally included in the list of subjects in the questionnaire. Since the questionnaires were administered by the investigator himself, he (the investigator) instructed the girls to fill in that subject and check accordingly. Only 20 out of the 30 students acted according to the instruction.

CHAPTER III

REVIEW OF RELATED LITERATURE

A number of studies have been made on subject preferences of secondary school students and the factors which affect their choices of subjects. One of such studies is "Curriculum Interests of Secondary School Children"[4] conducted in Freetown in 1961. The purpose of the study was to determine the popularity statuses of various subjects offered in secondary schools and to find out why students tended to like certain school subjects and to dislike others. English grammar with an index of .95 was found to be the most popular among boys and girls while music, art, handicrafts, French and Latin were found at the bottom of the list. Other popular subjects appeared to be English composition, English prose, scripture and biology with mean ratings of .88, .75, .85 and .84 respectively.

[4] O.M. Ferron, "Curriculum Interests of Secondary School Children." West African Journal of Education, vol. 9, 1965, pp. 12 - 14.

Mathematics was found to be more popular with boys than with girls.

The reasons given for liking or disliking various subjects in the curriculum were as follows: the vocational value of the subject appears to be rather more important for boys rather than girls, while for girls such considerations as marks obtained and teachers' method of presentation tended to tip the balance.

Frymier[5] conducted another research entitled "A study of students' motivation to Do Good Work in School." His findings seem very relevant to the present investigation and are as follows: interest in the subject matter, liking the teacher and the subject, grades and other forms of recognition, the students' physical and emotional status, and the physical factors in the classroom (light, temperature, distraction).

Marie[6] studied the "Variables Associated with Curricular Choice of Secondary School Pupils."

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[5]Jack R. Frymier, "A study of Student's motivation to do Good work in School," Journal of Educational Research Vol. 57, January 1964, pp. 239 - 244.

[6]Marie E. Yevak, "Variables Associated with Curricular Choice of Secondary School Pupils," Journal of Educational Research Vol. 60, January 1967, pp. 205 - 208.

She found that intellectual variables, family background and difficulty of the course to be related to curricular choice of secondary school pupils.

Thomas and Surachmad[7] in their study of "Likes and Dislikes of Indonesia Pupils" found that likes focused primarily on school subjects, with Arithmetic and Algebra, History, Physical Education, Biology, English language, Indonesian language and drawing as the ten most popular choices of both boys and girls. Girls showed a greater preference for Reading, Biology, Music and History, whereas a large percentage of boys than girls selected Arithmetic and Algebra, Geometry and Physical Education.

Surprising enough for both boys and girls the most common dislikes were Music, Drawing, Arithmetic, Algebra and Geometry.

Explaining this apparent contradiction the investigators wrote that (1) There was a difference in the frequency with which pupils encountered different subjects. (2) There is apparently also a difference in the amount of emotion, either positive or negative, that certain subjects tend to generate.

[7] R. Murray Thomas and Winarno Surachmad, "Likes and Dislikes of Indonesian Pupils," Journal of Educational Research, Vol. 56 October, 1962. pp. 68 - 74.

Because such activities as drawing, singing and dealing with algebraic concepts seem to involve somewhat specialized abilities, it is possible that they cause great satisfaction for successful pupils who possess these abilities and at the same time cause greater frustration for those who do not. It is possible also that children who were inadequate in more basic academic skills such as reading and writing have already been eliminated from school, whereas pupils with lesser ability in music, art and algebra could still follow the typical academic course successfully.

In his "Analysis of Subject Preference of Elementary Children of Middle Grades" in Los Alamitos School district, carlifornia, Greenblatt[8] made many findings which are very relevant to the present investigation.

(a) Subject Preferences: He found that art, arithmetic and reading enjoyed a substantial degree of preference. But these were not significantly preferred over social studies. Science and music occupied intermediate position, whereas writing, language and health were beyond question, the least preferred in his study.

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[8] E.R. Greenblatt, "An Analysis of school subject Preferences of Elementary children of middle Grades," Journal of Educational Research, Vol. 55, Aug. 1962 pp. 554 - 560.

(b) Sex and Subject Preferences: He found that boys preferred Science while girls preferred music and that this was significant at .01 level of confidence. The preference for Social Studies indicated by boys was significant at the .05 level of confidence. To determine the degree of correspondence between the selectionsof boys and girls he used rank order correlation and found that there was a significant relationship between the subject preferences of both sexes.

(c) Achievement and subject Preferences:
Chi Square test of the significance between achievement in reading and Arithmetic and choices of these subjects were computed by him. In so far as reading was concerned no relationship was discovered between achievement of pupils and the degree to which they preferred it. Girls however, appeared to choose or not choose arithmetic in orders of their achievement in the subject. This was significant at .02 level of confidence.

(d) Intelligence Level and subject Preferences:-
He found a wide divergence of opinion between the choices of boys and girls with an IQ of 91 or below, whereas there was a marked similarity in subject.

preferences between the two sexes with an IQ of 110 or higher.

Howard H. Mosher[9] studied the "Subject Preferences of Girls and Boys" in urban and rural communities. He found that the first three choices in the middle elementary grades (IV, V and VI) in the urban community were Arithmatic, Spelling and Art. In the rural community, they were Arithmetic Art and Spelling. In the mountain community the top three subjects were Arithmetic, Spelling and Art. On this level, the subjects preferred were the same irrespective of the type of community, the only variation being in the rank order.

The first three preferences in grades VII and VIII in the urban School were Arithmetic, Language and Social Studies. In the mountain community they were Arithmetic, Art and Science.

The high school girls and boys in both the urban community and rural community chose the same three subjects, the only variation being in the rank order. Those in the urban community ranked English, Social Studies and Mathmetics as their first three subjects while the pupils

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[9]Howard H. Mosher, "Subject Preferences of Girls and Boys" School Review, Vol. 60, 1952, pp. 34 - 38.

in the rural area indicated Social Studies, English and Mathematics.

Sex differences:- He found little statistical significance between choices of girls and those of boys when first-choice-only data was considered. Girls in the middle elementary grade preferred music and spelling as first and second choices while arithmetic and art tied for the third place. Boys in the same community preferred Arithmetic, Social Studies and Spelling. The subjects preferred by girls in the rural community were arithmetic, art and reading. Boys preferred Art, Arithmetic and Social Studies.

> The totals (not given in the tables), first-choice-only and percentages of all pupils in the middle elementary grades show Spelling, Arithmetic and Art for girls; Arithmetic, Art, and Spelling for boys. There is little in this investigation to indicate that there is any sharp line of demarcation between preferences in the "aesthetic" subject area for girls and the "Skills" area for boys.[10]

In short he found little significant difference between the first choices of boys and girls.

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[10] Ibid. p. 36.

S.E. Dean[11] investigated the "Relation of children's subject Preference to their achievement" among 5th grade children. He reported that statistically no significant differences in their selection of Arithmetic, Spelling and reading.

In a follow-up study of Boston Fifth-Grade children, "Preference Studies in Elementary School Social Studies" Chase and Wilson[12] found Reading, Art, Spelling and Social Studies to rank high in terms of pupils' preference. They reported that boys showed a significantly strong preference for Social Studies than do girls but reported no other significant preference on the basis of sex. Comparing teacher preference with student choices, a strong relationship was found to exist in all subjects except Art and Spelling.

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[11] S. E. Dean, "Relation of children's subject preferences to their achievement", Elementary School Journal, Vol. 51 1950, pp. 89 - 92.

[12] L.W. Chase and G.M. Wilson, "Preference Studiess in Elementary School Social Studies" Journal of Education, Vol. 140, 1958, p. 1 - 28.

Ability and Interest

Tyler[13] in her investigation into "The Relationship of Interest to abilities and reputation among First-Grade Children" showed that ability and interest are related in boys but not in girls. She attributed these differential findings to social role expectation associated with sex. Her resulting phyothesis was that boys have differentiated occupational role models which encourage the development of interests in line with their abilities, while girls' role model (housewife) is not such as to encourage the development of interest in line with abilities. Tyler interpreted her findings as ruling out aptitudes as a basis for interest development, but what she seemed actually to have shown is that Social expectations encourage or inhibit the formative influence of aptitude.

Some writers have done much work on interest in general, its history, its nature, its theory and application and its nature. Interests are always the interests of a particular person and hence extremely personal.

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[13] Leana E. Tyler "The Relationship of Interests to abilities and Reputation Among First-Grade Children," Educational and Psychological Measurement II No. 3, 1951, pp. 255 - 64.

They are relatively specific. Further-more interests are the product of specific influences in the life of each individual. A given interest may be a manifestation of an underlying urge or circumstance which is not apparent in the interest as an outsider sees it. A child's interest in travel books may stem from his desire to get away from a restrictive and unhappy home.

> Generalizations may be made about influences that affect interest - physical environment, socio-ecomonic status, conventions - but such generalizations are very inadequate for understanding a particular individual's interests at a certain time. His interests are a complex result of his entire history. They cannot be understood from generalities but must be seen in the perspective of his total experience[14]

A generalized treatment of interests makes the topic cold.

To the person concerned, however, an interest is a dynamic feeling. To have an interest is to feel hunger, an urge, a craving and a restlessness, and when he is

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[14] Pressey Op. Cit. p. 107.

in the grip of an interest he feels excitement, thrill, satisfaction and a sense of expanding well-being or a let-down, discouragement and frustration depending on whether the interest is satisfied or not. Obviously his interests and their gratification or denial are matters to which he is acutely senstive.

An interest grows and flourishes if it is satisfied and if it is approved, and brings recognition, but it tends to weaken if such results are not recognized.

Theory and Application

Basic urges: Back of particular interests and the sources of their energy are physiological tensions or pressures or urges. Broadest and greatest in importance is the urge toward activity that is normal in every healthy organism.

The strength of these basic drives differs greatly in different people. Thus some children have great urge for physical activities whereas others are indifferent; some are mentally very lively, others are not, sex is much stronger in some persons than others. Some people crave greatly for approval of others, but a few seem to be indifferent. In brief this is the concept regarding the basic urges inderlying the interest of children and

young people.

Any educational programme which tries to block one of these basic urges or drives is sure to give rise to conflicts and disciplinary problems and to lack of vitality and interest for pupils. The old fashioned school which asked children to sit still and be quiet was contary to theories of learning. The conservative secondary school or college which separates adolescent boys and girls just when they are most interested in each other and might be going through processes of healthy friendship is contrary to learning principles, any school which rules it wrong for pupils' to talk together is going against the most established, and pervasive of, all human tendencies and of the most desirable.

Limiting and Stimulating Conditions:

Interests are highly adaptable and responsive to the conditions and circumstances of each child's life. His playthings, play places, the family resources, the community resources as regards recreation and vocation - for the average person these factors are largely definitive as to what his interests will be.

Conditions which limit or stimulate interests in the individual may be found in the individual as well as the environment. Obviously a deaf child is likely to have little interest in music or a crippled child, in active sports. Equally it would be strange indeed if a girl with good and lovely voice did not like to sing. The dull boy will hardly enjoy debating or mathematics but the bright one may. In general, interest and ability go together.

The Anthropology and Sociology of Interest:

Often more important are customs and conventions, fashions and fads which make certain things acceptable or admired to do, whereas other interests are considered inappropriate or even taboo.

Thus the Society in which the individual grows up has an enormous influence upon his interests. Within the limits set by his capacities and the gross circumstance of his life, a person's interests are primarily the product of his culture and the society in which he lives.

However it is possible by persistent shrewdness to modify and even somewhat redirect these influences.

Interest and Meaning.

> Interest is closely related to mening. The interest value of an object or event closely depends upon its meaning to the child.[15]

Highlighting this point, H.G. Wheat[16] wrote that any object,

> If it has no meaning - if it does not signify something to be picked up, handled, examined, avoided, played with, or otherwise used - creates no mental disturbance, and hence no interest ...

Learning may be motivated by an "anxiety" - by a need to know. Interest is aroused only if something causes a mental disturbance.

The Nurture of Interests.

A vigorous interest must have its basic root in basic urges. It should involve liveliness, mental if not physical, companionship. It should be appropriate to the stage of development and abilities, to physical and Socio-economic setting.

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[15] Henry P. Smith and Emerald V. Dechant, Psychology in Teaching Reading, London Prentice-Hall International Inc., 1961, p. 2.

[16] H.G. Wheat. Foundations of School Learning. New York: Alfred A. Knopf, 1955, pp. 46 - 47.

For an interest to grow there should be room, time, and place for it to do so, and usually some cultivating. If an interest is to grow, it should have the warm sun of success and approval. If it should grow strong there should be rich rewards for various drives and purposes, with continually opening possibilities for yet further satisfaction.

Super Donald E. and Bachrach P. B[17], in their work gave impressive and reasonable generalizations and conclusions about interest. They said:

> It seems an oversimplification to think of aptitude, social expectation or needs and values as the sole determinants of interests. Actually all these combine to determine interests. What a person can do well and what people expect him to do limit the activities in which his needs and values will manifest themselves and the preferences which they lead him to formulate. They limit also the development of his interest. What a person needs and values and what people expect him to do limit the outlets which he will find and use his aptitudes. And what a person needs and what he can do limit his responses to social role expectations. No Theory of interest which fails to give due emphasis to all the three types of factors seems likely to stand the test of time or to prove very helpful to educators.

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[17]Super, Donald E. and Bachrach P.B. "Scientific Careers and Vocational Development Theory." in Encyclopedia of Educational Research, ed. by chester W. Harris and Marie R. Liba, 3rd ed. New York: The MaCmillam Co. 1960. p. 730.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF DATA AND FINDINGS

Presentation and Analysis of data

The data secured in this investigation were compiled in 13 tables broken by sex, by both sexes and by finding the significance of relationship for each sex and for both sexes.

Tables I, II and III below show that English language, Bible knowledge and Biology have the highest popularity indexes for both boys and girls, the only variation being in the rank order. For both sexes English language came first with a popularity index of .98 for boys and +1 for girls. For the girls Biology tied with English language, and for the boys Bible knowledge tied with English language. For the boys Biology came third with an index of .93 and for the girls Bible knowledge came third with an index of .93. For the boys chemistry with an index of .65 came fourth while for the girls Mathematics and History tied for the fourth position with

an index of .80 each. For the boys literature with an index of .50 occupied the fifth position while for the girls physics and Chemistry tied for the sixth position with an index of .60 each. Mathematics, Physics and History which were found to be less popular with boys with mean ratings of .35, .20, and .03 were rather popular with girls with mean ratings of .80, .80 and .60 respectively. Geography and French were found to be unpopular with both boys and girls with mean ratings of -.13 and -.93 each for boys and -.07 and -.30 for girls. Igbo which is done by the girls' school alone was found to be the most unpopular subject among them with a mean rating of -.33 while Home Management was fairly popular, with a mean rating of .40.

The Over-all popularity index of subjects for both boys and girls combined (table IV) shows that English (.98), Bible knowledge (.96) and Biology (.95) were very popular among students. At the bottom of the list were Physics (.31), History (.24) Geography (-.20), Igbo (-.33) and French (-.69). English literature, Mathematics and Home Management with mean ratings of .47, .47 and .40 respectively occupied a central position.

TABLE I

Subject Popularity Index for Boys

Subject	Like	Don't Like	Total number of students	Popularity Index.
English Language	79	1	80	.98
English Literature	60	20	80	.50
Mathematics	54	26	80	.35
Physics	48	32	80	.20
Chemistry	69	11	80	.65
Biology	77	3	80	.93
Geography	35	45	80	- .13
History	41	39	80	- .03
French	3	77	80	- .93
Bible Knowledge	79	1	80	.98

TABLE II

Subject Popularity Index for Girls

Subject	Like	Don't Like	Total number of students	Popularity Index
English Language	30	0	30	+1
English Literature	21	9	30	.30
Mathematics	27	3	30	.80
Physics	24	6	30	.60
Chemistry	24	6	30	.60
Biology	30	0	30	+1
Geography	9	21	30	- .30
History	27	3	30	.80
French	14	16	30	- .07
Igbo	10	20	30	- .33
Bible Knowledge	29	1	30	.93
Home Management	14	6	*20	.40

* Only 20 students responded to this question.

TABLE III

Subject Popularity Index According to SEX

Subjects	Popularity Index	
	Boys	Girls
English Language	.98	+1
English Literature	.50	.30
Mathematics	.35	.80
Physics	.20	.60
Chemistry	.65	.60
Biology	.93	+1
Geography	- .13	- .30
History	- .03	.80
French	- .93	- .07
* Igbo	-	- .33
Bible Knowledge	.98	.93
* Home Manangement	-	.40

* Igbo and Home Management are not studied in Class III in the boys high school..

TABLE IV

Subject Popularity Index for Both Boys and Girls

Subject	Like	Don't Like	Total Number of Respondents	Popularity Index
English Language	109	1	110	.98
English Literature	81	29	110	.47
Mathematics	81	29	110	.47
Physics	72	38	110	.31
Chemistry	93	17	110	.69
Biology	107	3	110	.95
Geography	44	66	110	- .20
History	68	42	110	.24
French	17	93	110	- .69
Igbo	10	20	30	- .33
Bible Knowledge	108	2	110	.96
Home Management	14	6	20	.40

* Subjects in asterisks are offered by the girls' school only. In the case of Home Management, only 20 students responded to the question.

Table V below shows the popularity index of subject teachers on the staff of the Boys' High School. As can be seen in the table, the English literature teacher occupied the first position as the most effective teacher (.88) and the second position as the most favourite teacher (.70). The History teacher occupied the second position as an effective teacher (.83) and tied with the English literature teacher for the second position as a favourite teacher (.70). The Bible knowledge teacher had the third position as a favourite (.78). The Mathematics teacher with low ratings of .30 and .30 occupied the fourth position as an effective teacher and fifth position as a favourite teacher respectively. The French teacher had very poor ratings as an effective teacher (.28) and .18 as a favourite teacher, occupying the fifth and seventh positions respectively. The Ehglish language teacher had the sixth position as an effective teacher (.13) and tied with the Mathematics teacher for the fifth position as a favourite teacher (.30). His ratings were really very low. The Geography teacher with a mean rating of - .65 as an effective teacher could be said to be a poor teacher and occupied the seventh position which is the second to the last position. He had a mean rating of .4 as a

favourite teacher occupying the fourth position. The Biology teacher had mean ratings of - .18 as a favourite teacher and -.63 as an effective teacher, thus suggesting that he is unpopular among students and ineffective in his work. He is found at the very bottom of the list.

When Table V (popularity index for subject teachers on the staff - Boys' High School only) is compared with table IV (Subject popularity index for both boys and girls) interesting findings are easily made. For English language which had the highest popularity index of .98 for boys the subject teacher received very low ratings as favourite teacher (.30) and an effective teacher (.13). For Bible knowledge which tied with English language, the teacher had very high ratings as a favourite teacher (.78) and as an effective teacher (.78). For Biology which occupied the third position with an index of .93 the teacher received very poor ratings as a favourite teacher (-.18) and as an effective teacher (-.63). In the case of History which had a very low popularity index of .03, the teacher received high ratings as a favourite teacher (.70) and as an effective teacher (.83). There were very low ratings for

teachers of Geography and French as there were for the subjects themselves.

It is important to note that for English literature which occupied the central position the teacher received the highest popularity index of .88 as the most effective teacher and the second highest index of .70 as a favourite teacher.

Thus the table shows that the respondents were not marking the teachers they liked or disliked in the name of the subjects they liked or disliked. There were some strong reasons behind their responses.

Table VI shows the popularity index of subject teachers on the staff of the girls' secondary school. As can be seen in the table, the Biology teacher occupies the first position both as the most effective teacher (.80) and as the most favourite teacher (.87). This is followed by the Mathematics teacher who occupies the second position both as effective teacher (.60) and as a favourite teacher (.66). The physics teacher has the third position as an effective teacher (.46) and the fourth position as a favourite teacher (.46). The Chemistry teacher occupied the fourth position as an effective teacher (.40) and the third position as a favourite teacher with a mean rating of .53.

The History teacher with a poor rating of -.20 tied with the Bible knowledge teacher for the fifth position as an effective teachers. The History teacher had a very low rating of .07 as a favourite teacher and occupied the eighth position here while the Bible knowledge teacher with a low rating of .13 as a favourite teacher occupies the fifth position. The French teacher had a poor rating of -.23 as an effective teacher occupying the seventh positior while he had .07 as a favourite teacher and occupies the eighth position and as a favourite teacher he tied with the History teacher. The English language and English literature teachers tied both as effective teachers (-.47) and as favourite teacher (.13) for the eighth and fifth positions in each case. The Home Management teacher had very low ratings as an effective teacher (-.53) and as a favourite teacher (-.33) and occupies the tenth place in the first case and eleventh position in the second. The Geography and Igbo teachers had very poor ratings. As an effective teacher the Geography teacher has a rating of -.66 and occupies the eleventh position while as a favourite teacher he has -.07 occupying the tenth place. The Igbo teacher is at the bottom of the list both as an effective teacher (-.73) and as a favourite teacher (-.47).

Again when Table VI (Popularity index for subject teachers on the staff - girls secondary school only) is compared with Table IV (Subject popularity index for both boys and girls) striking findings are also made. For English language which has the highest popularity status of +1 the teacher has very poor ratings as a favourite teacher (.13) and as an effective teacher (-.47). For Biology which tied with English language the teacher had very high ratings as a favourite teacher and as an effective teacher (.80). In the case of Bible knowledge which had the third position with an index of .93, the teacher received very poor ratings as a favourite teacher (.13 and as an effective teacher (-.20). History with a high index of .80, the popularity index for the teacher as a favourite teacher is .07 and as an effective teacher is -.20 and these are quite low. Mathematics which tied with history has for the teacher, mean ratings of .66 and .60 as a favourite and effective teacher respectively. Physics which has a popularity status of .60 has for the teacher mean ratings of .46 and .46 as a favourite and an effective teacher respectively and Chemistry which tied with Physics has .53 and .40 for the teacher as a favourite one and effective teacher respectively. Home Management which occupied a central position with an

index of .40 has for the teacher -.33 and -.53 as a favourite teacher and an effective teacher respectively. Literature, French, Geography and Igbo with low mean ratings of .30, -.07, -.30 and -.33 have corresponding low mean ratings for their teachers as favourite and effective teacher as follows: literature .13 and -.47, French .07 and -.23, Geography -.07 and -.66, Igbo -.47 and -.73.

Thus, as in the case of boys the girls were not merely marking the teachers they liked or disliked in the name of the subjects they liked or disliked. There were some strong reasons behind the responses they made.

TABLE V

Popularity Index for subject Teachers on the Staff

	Boys' High School		
Subjects	Total number of students	Favourite Teacher	Effective Teacher
English Language	80	.30	.13
English Literature	80	.70	.88
Mathematics	80	.30	.30
* Physics			
* Chemistry			
Biology	80	- .18	- .63
Geography	80	.4	- .10
History	80	.70	.83
French	80	.18	.28
Bible Knowledge	80	.78	.78

* Names of teachers of these subjects were not given and therefore they were not rated.

Popularity Index For Subject Teachers On the Staff

Girls' Secondary School

Subject	Total number of students	Favourite Teacher	Effective Teacher
English Language	30	.13	- .47
English Literature	30	.13	- .47
Mathematics	30	.66	.60
Physics	30	.46	.46
Chemistry	30	.53	.40
Biology	30	.87	.80
Geography	30	- .07	- .66
History	30	.07	- .20
French	30	.07	- .23
Igbo	30	.47	- .73
Bible Knowledge	30	.13	- .20
Home Management	20	- .33	- .53

Table VII for boys only shows that for the usefulness of a subject to students' future career or even if he does not pursue a career as a factor in making him like or dislike a subject Z is smaller than .01 and therefore very significant at .01 level of confidence. The null phyothesis that no relationship exists between the vocational value of subjects and students' interest in school subjects is rejected with a high degree of confidence. The table also shows that for Teachers' method of presentation or teaching as a factor in making students like or dislike school subjects, Z is larger than .40 and therefore not significant. The investigator therefore fails to reject the null hypothesis that no relationship exists between teachers' method of presentation or teaching and students' interest in school subjects. For marks obtained in school subjects, Z is a little less than .10 and so not significant. Therefore, there is no statistical evidence to disagree with the null hypothesis that no relationship exists between marks obtained in subjects and students' interest in school subjects. Finally for the difficulty of a subject Z is smaller than .01 level of confidence and so very signficant. Therefore there is strong statistical relationship between the difficulty of subjects and students' interest in school subjects.

TABLE VII

Factors That Affect Students' Interests in School Subjects

BOYS ONLY

Factors	Yes	No	Total number of Respon-dents	Popularity Index	Z test of + Significance
The Usefulness of a Subject to my future career or even if I do not pursue a career	79	1	80	.98	Z = 8.722**
Teachers method of presentation or teaching	36	44	80	-.10	Z = .8925
Marks obtained in a subject	27	53	80	-.33	Z = 2.907
The difficulty of a subject	8	72	80	-.68	Z = 9.007**

** = Signficant at .01 level of confidence.

+ , Formula[18] $Z = \frac{fo - fe}{\sqrt{Npq}}$

fo = frequency observed

fe = frequency expected

N = Total Number of respondents

p = $\frac{1}{2}$

q = $\frac{1}{2}$

[18] I.P. Guilford and Benjamin Fruchter, Fundamental Statistics in Psychology and Education, 5th ed. Tokyo: McGraw - Hill Inc., 1973, p. 196.

Table VIII below (for girls only) shows that for the usefulness of a subject to a students' future career or even if she does not pursue a career as a factor in making her like or dislike a subject Z is a little larger than .02 and therefore significant at .05 level of confidence. There is sufficient statistical evidence to disagree with the null hypothesis that no relationship exists between the vocational value of subjects and students' interest in school subjects. The table, also shows that for teachers' method of presentation or teaching Z is a little less than .05 and therefore significant at .05 level of confidence. The investigator also rejects the null hypothesis that no relationship exists between teachers' method of presentation or teaching and students' interest in school subjects. For marks obtained in school subjects Z is a little larger than .05 and so not significant. Thus no statistical relationship exists between marks obtained in subjects and students' interest in school subjects. Finally for the difficulty of a subject Z is equally a little larger than .05 level of confidence and so not significant. The researcher therefore fails to reject the null hypothesis that no relationship exist between the difficulty of subjects and students' interest in school subjects.

TABLE VIII

Factors that Affect Students' Interest in School subjects.

GIRLS' ONLY

Factors	Yes	No	Total number of respondents	Popularity Index	Z test of Significance
The usefulness of a subject to my future career or even if I do not pursue a career	29	1	30	.93	Z = 5.111*
Teachers' method of presentation or teaching	26	4	30	.73	Z = 4.016*
Marks Obtained in a subject	6	24	30	- .60	Z = 3.282
The difficulty of a subject	6	24	30	- .60	Z = 3.283

*Significant at .05 level of confidence.

below
Table IX for both boys and girls combined shows that for the usefulness of a subject to a student's future career or even if he/she does not pursue a career as a factor in making him/her like or dislike a subject Z is smaller than .01 and therefore very significant at .01 level of confidence. The null hypothesis that no relationship exists between the vocational value of subjects and students' interest in school subjects is rejected with high degree of confidence.
For the teachers' method of presentation or teaching Z is larger than .20 and therefore not significant.

Thus there is no statistical evidence that a relationship exists between teachers' method of presentation or teaching and students' interest in school subjects. For marks obtained in a subject Z is smaller than .05 and so significant at .05 level of confidence. The investigator thus rejects the null phyothesis that no relationship exists between marks obtained in subjects and students' interest in school subjects. Finally for the difficulty of a subject Z is smaller than .01 and therefore very significant at .01 level of confidence. Therefore very significant at .01 level of confidence. Thus great statistical relationship exists between the difficulty of subjects and students' interest in school subjects.

Table VII above shows that for boy s only the vocational value of a subject and the difficulty of a subject are very strong factors in making students like or dislike a subject. Table VIII also shows that for girls, the vocational value of a subject and teachers method of presentation or teaching are strong factors in making them like or dislike a subject. For girls unlike boys, the difficulty of a subject does not make them like or dislike a subject and for boys unlike girls, teachers' method of presentation does not make them like or dislike a subject. For both boys and girls as tables VII and VIII show, marks obtained in a subject does not make them like or dislike a subject. But when the responses of both boys and girls are combined as shown in table IX Teachers' method of presentation only does not make students like or dislike school subjects. The other three factors, the voational value of a subject, marks of obtained in school subj ects and the difficulty of a subject are all related to students' like or dislike for school subjects and thus the choices of subjects they make as regards the subjects they offer in the West African School Certificate.

TABLE IX

Factors that Affect students' Interests in School Subjects.

For Both Boys and Girls:

Factors	Yes	No	Total number of Respondents	Popularity Status	Z Test of Significance
The usefulness of a subject to my future career or even if I do not pursue a career	108	2	110	.96	Z = 12.60**
Teachers' method of presentation or teaching	62	48	110	.13	Z = 1.33
Marks ob tained in a subject	33	77	110	- .20	Z = 4,601*
The difficulty of a subject	14	96	110	- .74	Z = 7.820**

** Signficant at .01 level of confidence.

* Significant at .05 level of confidence.

Tables X, XI and XII below show that the main reason why students like or dislike a subject is whether it is related t their future career or not. This is followed by whether they obtain high marks in the subject or whether it is easy and interesting to them. Intrinsic value of a subject is the third factor that accounts for their interest in a school subject. Lastly teachers' method of presenting their subjects and their personal qualities are other factors that make students like or dislike subjects offered in Secondary Schools.

TABLE X

Point Accumulations for Students' Most favourite Two Subjects Giving three reasons why they Like them.

Boys Only

Reasons	Points Assigned
Future Career.	129
Intrinsic Value of a subject.	105
High marks/easy/interesting	107
Teacher Presentation/Characteristics.	15

TABLE XI

Point Accumulations for Students' most favourite Two Subjects Giving three reasons why they like them.

Girls Only

Reasons	Points Assigned
Future Career	45
Intrinsic Value of a subject.	29
High marks/easy/interesting	52
Teacher Presentation/Characteristics	20

TABLE XII

Point Accumulations For Students' Most Favourite Two Subjects Giving three reasons why they like them.

Both Boys and Girls

Reasons	Points Assigned
Future Career.	174
Intrinsic Value of a subject	134
High Marks/Easy/Interesting	159
Teacher Presentation/Characteristics	35

Table XIII shows the rank order correlation between subject popularity statuses of boys and girls. A can be seen from the table Rho = +.70. This shows that there is a high positive correlation between the subject choices of boys and girls.

TABLE XIII

Rnak Order Correlation Between Subject Popularity Statuses of Boys and Girls.

Subjects	Boys, N = 80		Girls, N = 30		D	D^2
	Popularity Index	$Rank_1$	Popularity Index	$Rank_2$		
English Language	.98	1	+1	1	0	0.00
English Literature	.50	5	.30	9	4	16.00
Mathematics	.35	6	.80	4.5	1.5	2.25
Physics	.20	7	.60	6.5	0.5	0.25
Chemistry	- .65	4	.60	6.5	2.5	7.25
Biology	.93	3	+1	1	2	4.00
Geography	- .13	9	-.30	11	2	4.00
History	.03	8	.80	4.5	3.5	12.25
French	- .93	10	-.07	10	0	0.00
Bible Knowledge	.98	1	.93	3	2	4.00
*Igbo			.33	12		
*Home Management			.40	8		

$\Sigma D^2 = 50.00$

* Denotes subjects not offered in Boys' high school and so not comparable.

Formula:[19] $\rho = 1 - \frac{6 D^2}{N(N^2-1)}$

$= 1 - \frac{6 (50)}{10(100-1)} = + .7 0$

Rho = +.70

[19] Ibid. p. 284

Interpretation of Data and Findings

Tables I and II show that English language with an index of .98 for boys and +1 for the girls appears to be the most popular subject among both boys and girls. This is also shown in table IV where the popularity index for both boys and girls are combined. The reasons for this are not far to seek. In the first place the passing of English language is a condition for the award of the West African School Certificate. This is a strong reason in motivating students to put in their best in studying the subject and in developing interest for it. The English language is very necessary in entering many professions in Nigerian. Students see in it a key to their future success in life. Nigeria is made up of many ethnic groups speaking different languages. The English language is the only means of communication among the various peoples of Nigeria. The need to communicate acts as a motivational force in making students develop interest in the subject. Again English language is an international language. The need to be able to communicate with the outside world enhances the motivation to master the subject.

English language is used in studying other subjects. To understand other subjects, then, it is necessary to understand the English language well. This is a strong factor making for the popularity of the subject. In a country where many people are illiterates as in Nigeria, students see in the acquisition of the English language a sort of status symbol.

Table IV shows that Bible knowledge with a popularity index of .96 occupies a second position. Table I shows that for the boys only it tied with English language for the first position and Table II shows that for the girls it occupies the third position with an index of .93. The reason for the popularity of this subject may be that this research was conducted in the christian part of the country where people start studying the Bible from childhood in the churches and in their homes. Thus the interest in reading the Bible is developed from childhood and is carried over to the school. Again everything studied in Bible knowledge centres around the Bible itself and nearly everybody has got access to the Bible from which they could read and understand. Most people all over

the world attach great interest to their religion and that alone could account for the popularity of the subjects among students in this christian area where the research was conducted.

Biology with an index of .96 (Table IV) occupies the third position. Tables I and II show that for the boys it has an index .93 while for the girls it tied with English language with an index of +1. The reasons for the high popularity of the subject could be that the subject deals with human life and many people like to learn much about their lives. Not only does it deal with human life it also deals with nature in general, animals and plants alike. Among many people there is great interest and excitement in learning about nature. The subject does not deal with much abstractions, and dry reasoning. The study of it seems quite practical. In the absence of facilities the teacher can always improvise.

Table IV shows that chemistry had the fourth position with an index of .69, while table I and II show that it is relatively popular among both boys (.65) and girls .60) occuping the fourth position in the case of boys and sixth position in the case of girls.

But while English literature which occupies the fifth position with a low index of .47 (Table IV) is fairly popular among boys it is not quite popular among girls (.30). The reasons why English literature did not receive high popularity index as one would expect are the difficulty attached to the interpretation of poetry, wide scope of reading involved, and moreover some of the books are "ancient" books written in old English which makes it difficult to understand and uninteresting to the students. Again some of the books are based on foreign background which makes it difficult for Nigerian students to understand. Furthermore most African literature books recommended for the students have "hidden" meanings. All these contribute to the relative unpopularity of the subject especially among the girls.

Mathematics tied with English literature for the fifth position (Table IV). But while the subject is not popular among boys (.35) it is very popular among girls (.80) as shown in tables I and II respectively. The reasons for the relatively low popularity of the subject might be partly due to poor teaching and a rather unrealistic approach particularly in the primary school, and partly due to the fact that the theoretical concepts presented are not in line with the maturational level of the children. The content of some

mathematics syllabi would suggest that the subject could more appropriately be labelled "Logic." But one wonders why the subject should be so popular among the girls interviewed in this research. But Tables V and VI seem to suggest a reason. In table V the popularity index for mathematics teacher for the boys' high school as a favourite teacher is .30 and as an effective teacher is .30 also, while for the Girls' Secondary School the popularity index for the mathematics teacher as a favourite teacher is .66 and as an effective teacher is .60. Thus teachers' method of presentation and personal characteristics partly accounts for the reasons why the subject received such a high index among girls and a very low index among the boys in this study. Moreover Table VIII shows that in testing the null hypothesis that there is no relationship between teachers' method of teaching and students' interest in school subjects Z test was significant at .05 level of confidence for the girls.

Home Management which is offered in girls' college only occupied the seventh position with a low index of .40. It is surprising that many girls do not like the subject. But as in the case of mathematics for boys' college, the low index for Home Management may be partly due to teacher variability. Table VI shows the popularity index

for the Home Management teacher as a favourite teacher is -.33 and as an effective teacher is -.55. Thus the attitude of the teacher to teaching, her interest in teaching the subject, her ability in teaching the subject and the type of training she had all go to affect the interest of students in her subject.

Physics received a low popularity index of .31 (Table IV). Like Mathematics it is more popular among the girls (.60, Table II) than among the boys (.20, table I) as far as this study is concerned. The general low popularity for this might be, as in the case of mathematics, that it requires some logical approach. Moreover, without adequate laboratory for practicals, the study of the subject becomes very dry and uninteresting. Unfortunately in the area where this reasearch was conducted, the schools are not well-equipped with such facilities. But it is surprising why it should be popular among girls, since the girls' school faces the same condition of lack of laboratory facilities. However the ratings for the subject teacher as a favourite teacher (.46) and as an effective (.46) are fair enough as to conclude that the teachers' method of teaching, ability and personal qualities must have engendered interest in the students to like his subject. In the case of boys, the name of the subject teacher was neither given nor rated and therefore cannot be used as a source of comparision.

History with a low popularity index of .24 (Table IV) occupied the nineth position. Table I shows that History with an index of .03 is not popular among boys, while Table II shows that History with an index of .80 is quite popular among the girls used in this investigation. The overall low popularity of History might be partly due to vast reading involved and partly due to learning of dates and sequence of events. Apart from these reasons it is difficult to explain why History should be unpopular among boys when we take into account the students' ratings for their history teacher as a favourite teacher .70 and as an effective teacher .83, as stated in table V. However another plausible reason is that the boys might not have seen it as important for their future career which as table VII would suggest is a very important factor in determining students' interest in a school subject. In fact for that factor Z test is significant at .01 level of confidence. For the girls the ratings for the history teacher (Table VI) as a favourite teacher, .07, and as an effective teacher -.20 are very low. There must be other factors responsible for the high popularity index of .80 for the subject among the girls. It might be that traditionally the school has been doing well in the subject in the West African Examinations; or that their former teacher laid a good foundation in that

subject or that the students have a natural interest in studying history.

Table IV shows that Geography with an index of -.20 Igbo -.33 and French -.69 are disliked by the students.

There are many reasons for the low index for geography. Students say that the syllabus is extensive, embracing other subjects such as mathematics. They experience difficulty in learning things such as climate, vegetation, farming systems and transport systems of foreign countries which are not applicable to students' background. Moreover, the teaching of this subject requires elaborate teaching aids which are not available in the schools. Thus students get easily bored listening to what seems to them like "fairy tales". There is a great difficulty encountered in map reading which involves reading of scales and contours. Our students are not trained for keen observations from the primary school. This heightens the difficulty experienced. The subject requires team teaching which is not yet utilized in our schools. It is a bad practice to give lengthy notes to students. But this notwithstanding, many of our teachers still indulge in it. Many of our students tend to rate high a teacher who copies out lengthy, self-sufficient, notes on the chalkboard for them, thereby relieving them of their duty to make their own investigations and further reading.

Map reading does not give room for such notes. Hence students find that part of the subject very unpleasant and so dislike the subject. Tables I and II show that the subject is quite unpopular among both boys (-.13) and girls (-.33). Table V shows that the geography teacher in the boys' college has a mean rating of .4 as a favourite teacher and -.10 as an effective teacher. It is probable that lack of facilities is responsible for such a very low rating as an effective teacher. Table VI also shows the mean rating of geography teacher in the girls' secondary school as favourite teacher -.07 and as an effective teacher -.66. The same reason as in the case of boys' high School could be advanced for the low rating of the geography teacher in girls' college as an effective teacher.

Igbo is offered in girls' secondary school only and as noted earlier has an index of -.33. It is really unfortunate that the students' mother tongue should be so unpopular or disliked among them. Normally people find pride in learning and speaking their own native tongue because it is one of the things that identify them from other groups of people. The low index for this subject is really of great concern.

There are certain reasons for this low index for the subject. In the first place Igbo is not well taught in the colleges because there are no well qualified teachers for this subject. It is the only major Nigerian language not studied in the University. Teachers who teach it are those who have passed the subject at General Certificate of Education, Ordinary Level or those that have passed it in Grade II Teachers' Examinations. It is only recently that the study of Igbo language was introduced in Alvan Ikoku College of Education which graduates intermediate teachers. For the time-being the first batch has not passed out. Moreover there are few Igbo text books on sale in the market. Another reason for the unpopularity of the subject is that students tend to think that it is only the unintelligent ones that offer such a subject. Moreover, they do not see the possibility of pursuing any career by offering Igbo in the West African Examinations. The ratings of the Igbo teacher as a favourite teacher (-.47) and as an effective teacher (-.73) are very low to suggest that the teacher has not the ability to discharge his duties well and so arouse interest among his students.

French with an index of -.69 (Table IV) is at the very bottom of the list. The reasons for this are not difficult to find. French is not a popular medium of communication in Nigeria.

Thus, there is a low motivation to acquire the language. The method of teaching the language does not encourage development of interest in learning the language. Many teachers appear to be under the delusion that proficiency can be gained by mastering the formal rules of Grammar, and learning the meanings of words in isolation. This is almost certainly not so: we do not become proficient in football by learning the rules of the game or even by reading about or practising isolated movements. The young child in a French speaking home learns his mother tongue mainly as a result of initating patterns of sound, the motivational force involved being the need to communicate. Nowadays, most authorities advocate the learning of formal grammar quite incidentally, and the communication aspect of language teaching is considered to be of greater important. While audio-aids are important, it is even more important to give the child every encouragement to express his ideas freely and spontaneously, even if he does not use correct forms at first. By appropriate stimulation too, which is within the range of the child's experiences and comprehension, it is possible to make him feel the need to communicate. Another reason for the unpopularity of this subject is students not being aware of job opportunities or vocational utility of the subject.

The mean ratings for the French teacher in boys' high school (Table V) as a favourite teacher (.18) and as an effective teacher (.28) are all very low. Table VI also shows that the mean ratings of the French teacher in the girls college as a favourite teacher (.07) and as an effective teacher (-.123) are equally low to consider the teachers as a source of inspiration to the students.

Factors that Affect Students' Interests in School Subjects

(a) Vocational value of a subject:

Tables VII, VIII and IX show the factors that affect students' interests in school subjects. Table IX shows that the usefulness of a subject to the students' future career or even if he/she does not pursue a career is the strongest factor that affects students' choice of subjects to offer in the West African Examinations. This factor has a popularity index of .96 and in testing the null hypothesis for this factor, that is, that no relationship exists between the vocational value of subjects and students' interest in school subjects, Z is significant at .01 level of confidence, showing that there is high relationship between this factor and students' choice of subjects.

(b) Teachers' method of Presentation or teaching:

The second factor in the same table, teachers' method of presentation or teaching, has a popularity index of .13 and in testing the null phyothesis for this factor, that no relationship exists between teachers' method of presentation and students' interest in school subject Z is not significant and therefore upholds the null hypothesis that no relationship exists between this factor and students' interests in school subjects.

(c) Marks Obtained in a Subject:

The third factor is marks obtained in a subject. The popularity index for this factor is -.20 and in testing the null phyothesis that no relationship exists between marks obtained in school subjects and students' interest in school subjects Z is significant at .05 level of confidence, thus showing that relationship exists statistically between this factor and students' choice of subjects.

(d) The difficulty of a subject:

The last factor in the table is the difficulty of a subject which has a popularity index of -.74 and in testing the null phyothesis that no relation ship exists between the difficulty of subjects and students' interest in school subjects, Z is significant at .01 level of confidence

thus showing that a strong relationship exists between this factor and students choice of subjects.

It is important to note the relationship between the responses for the first factor - "The usefulness of a subject to my future career or even if I do not pursue a career" and the responses for the last factor "The difficulty of a subject". 108 students responded to the "Yes" category in the first factor while 96 students responded to the "No" category in the last factor. This shows that the last factor (the difficulty of a subject) is as strong a reason for choosing subjects to offer among students as "the usefulness to a subject to my future career or even if I do not pursue a career" is to them.

Tables VII and VIII deal with the factor that affect boys' and girls' interests in school subjects respectively.

Factors that affect interests of Boys in School subjects:-

(a) The vocational value of a subject:

Table VII (boys only) shows that the usefulness of a subject to a students future career or even if he/she does not pursue a career has the highest popularity index of .98 and for this factor in testing the null hypothesis Z is significant at .01 level of confidence. Therefore, among the boys a strong relationship exists between the vocational value of a subject and the choices of subjects they offer in the West African Examinations.

(b) Teachers' Method of presentation or teaching:

For the second factor - Teachers' method of presentation or teaching - the popularity index is -.10 and in testing the null hypothesis that no relationship exists between teachers' method of presentation or teaching and students' interest in school subjects, Z is not significant, thus affirming the null hypothesis.

(c) Marks obtained in a subject:

The third factor is marks obtained in a subject and for this the popularity index is -.33 and in testing the null phyothesis for this factor, Z is not significant and so confirms the null hypothesis that no relationship exists between marks obtained in a subject and students' interest in school subjects.

(d) The difficulty of a subject:

The difficulty of a subject is the last factor in the table and has a popularity index of -.68 and in testing the null hypothesis Z is significant at .01 level of confidence; thus showing that there is a strong relationship between the difficulty of a subject and students' choice of subjects.

It is important to note the relationship between the first factor - "The usefulness of a subject to my future career or even if I do not pursue a career "- and the last factor, "the difficulty of a subject." 79 students responded to the "Yes" category in the first factor while in the last factor 72 students responded to the "No" category of responses. This shows that the last factor, the difficulty of a subject is as important as the first factor, the usefulness of a subject to a student's future career or even if he/she does not pursue a career, in the choice of subjects that students make.

Factors that Affect girls' interests in school subjects.

(a) The Vocational Value of a subject:

Table VIII (girls only) shows that the usefulness of a subject to a student's future career or even if he/she does not pursue a career has the highest popularity index of .93 and in testing the null hypothesis that no relationship exists between vocational value of a subject and students' interest in school subjects, Z is significant at .05 level of confidence. Thus there is a significant relationship between the vocational value of a subject and students' choice of subjectsto offer. But when compared with the case of boys, this

factor is a stronger reason for the choices of subjects among boys (.01 level of confidence) than among girls (.05 level of confidence). One can say that boys think more about their future career than girls.

(b) Teachers' method of presentation or teaching:

The second factor in the table is teachers' method of presentation or teaching. This had a popularity index of .73 and when the null hypothesis for this factor was tested Z is significant at .05 level of confidence. This shows that for the girls there is significant relationship between teachers' method of presentation or teaching and their (girls') interest in school subjects. It is noteworthy that for the boys, with regard to this factor Z is not significant, showing that no relationship exists between teachers' method of presentation or teaching and boys' interest in school subjects. In otherwords teachers' method of teaching is not a significant factor in the choice of subjects boys make, unlike girls.

(c) Marks Obtained in a Subject:

Marks obtained in a subject, is the third factor in the table and it has a popularity index of -.60. When the null hypothesis for this factor was tested Z is not significant.

This shows that marks obtained in school subjects are not significant factors that account for the choice of subjects girls make. This also applies to boys as shown in Table VII.

(d) The difficulty of a subject:

The last factor in the table is the difficulty of a subject and this like the former had a popularity index of -.60, and in testing the null hypothesis Z is not significant, showing that for the girls the difficulty of a subject does not significantly affect their choice of subjects to offer. This is quite unlike the case of boys where Z is very significant at .01 level of confidence. For the boys this is a strong factor that influences their choice of subjects to offer.

Although it is a bit difficult to explain the reason why this factor (the difficulty of a subject) should influence boys' choices of subjects greatly, the researcher agrees with educators who assert that any subject could be difficult or easy to students depending on who teaches it and how it is taught. Thus the way a subject is taught colours the perceptions of the student about the subject that is taught and consequently affects his attitude to and interest in the subject. It is likely that in the two schools that are used for this investigation, teachers in the girls' school adopt methods that appeal to the interests of

the students. Moreover it is likely also that in presenting their lessons the teachers take the maturational level of the students more into consideration than teachers in the boys' college. Hence such subjects as Mathematics, Physics and Chemistry which are looked upon by students as difficult subjects received high popularity statuses among girls than among boys as shown in tables I and II.

It is important to draw attention to girls' responses to the first and second factors on the table. 29 students responded to the "Yes" category of responses in the case of the usefulness of a subject to student's future career or even if he/she does not pursue a career, and 26 responded to the "Yes" category of responses, in the case of teachers' method of presentation or teaching. This shows that for the girls, teachers' method of teaching is as important as the usefulness of the subject to their future career in making them choose the subjects they offer in the West African Examinations.

Tables X, XI, and XII show point accumulations for students' most favourite two subjects, giving three reasons why they like them.

Table XII shows that the foremost reason why students like or dislike a subject is whether it is related to their future career or not. This has 174 points. It is followed by whether they obtain high marks in the subject or whether it is easy and interesting to them. This reason has 159 points. The intrinsic value of a subject with 134 points is the third factor that accounts for their interest in school subjects. Lastly teacher's method of presentation and his personality are other factors that make students like or dislike subjects offered in secondary schools.

Table X for boys only shows the same order as in Table XII for both boys and girls combined.

But table XI, for girls only, has a different picture. For the girls the foremost reasons for liking a subject are whether they receive high marks in it, or whether it is easy and interesting. This group of reasons received a total of 52 points. This is followed by whether the subject is related to their future careers which has a total of 45 points. The third reason is the intrinsic value of a subject which has 29 points and the last is Teachers' method of presentation and/or characteristics which has 20 points.

It is important to note as shown in tables X and XI that for boys, their future career is the most important reason in choosing subjects to offer while for girls high marks, easiness of a subjects, and interesting qualities of

a subjects are the most important factors they consider in choosing subjects to offer in the West African Examinations. Again this suggests that boys think more about their future careers than girls. This may be as a result of their future role in life as bread-winners.

Table XIII suggests that there is a high positive correlation between the subject choices of boys and girls. It is a further demonstration that almost the same factors are involved in making boys as well as girls like or dislike subjects offered in school and hence in making choices of subjects they offer in the West African Examinations. It is worth metnioning that the subjects of this research (the boys and the girls) were drawn from two different schools with different teachers and varying qualities and quantities of teaching-learning materials, yet this notwithstanding there is a high positive correlation between the subject choices of the subjects, that is, the boys and girls used in this research.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

Many subjects are taught in Secondary Schools. The subjects offered in many schools range up to fourteen or more. But students are required to pass at least six subjects to obtain the West African School Certificate. However each student is allowed to choose a maximum of eight subjects; and for those offering additional Mathematics, they are allowed to offer up to nine subjects. Sometimes some students offer a minimum of six subjects. When one looks into the subjects offered in a single school by various students one finds wide differences in their choices. This fact becomes more pronounced when one takes account of the variety of subjects offered by students from different schools. This creates a problem situation whereby an interested educator is forced to inquire

for the reasons why students make choices of subjects they offer.

The objectives of this investigation were therefore:

(1) To find out the popularity status of each subject offered in secondary schools.

(2) To find out the reasons why students tend to like or dislike individual subjects offered in school.

(3) To suggest measures that could be taken to improve the interests of students towards school subjects.

Specifically this study was meant to answer the following specific questions:

(1) What subject or subjects are most liked by the students?

(2) What subject or subjects are most disliked by the students?

(3) What are the factors which influence students' interests in making the choices of subjects they offer?

To give substance and value to this study the following assumptions which might serve as guides in the search for meaningful variables were made:

(1) That Secondary School students while in school think of what profession they would pursue on completing the secondary education . The profession or career a student chooses will invariably affect his interest in making choices of subjects to offer in the School Certificate Examinations.

(2) Educationists contend that any subject could be taught at any level in a way that could be meaningful to the learner and therefore interesting to him. If a teacher lacks good methods of teaching he is likely to kill the interests of the students because he would not be capable of challenging them and thus arousing their interests. The researcher therefore assumed that teachers' method of teaching plays a great role in the choice of subjects that students offer in the West African Examinations.

(3) Positive reinforcement enhances interest in any human endeavour. When a student constantly scores high marks in certain subjects, he feels a sense of honour, reward and security. The reverse would be the case where a student constantly scores low marks in certain subjects. It is therefore likely the marks students obtain in various subjects might affect their

choices of subjects to offer in the West African School Certificate Examinations.

(4) Often people dislike any task when they find it difficult to tackle and look for easier ones. It is likely that students, like most human beings, might behave in the same way in making choices of subjects to offer in the West African School Certificate Examinations.

As a guide to this investigation, the hypotheses below stated in null form were advanced to test the relationships of the variables under study.

(1) No relationship exists between the vocational value of subjects and students' interest in school subjects.

(2) No relationship exists between teachers' method of presentation and students' interest in school subjects.

(3) No relationship exists between marks obtained in school subjects and students' interest in school subjects.

(4) No relationship exists between the difficulty of subjects and students' interest in school subjects.

The idea here was to see the degree to which the independent variables, the vocational value of subjects, teachers' method of presentation, marks obtained in school subjects, and the difficulty of subjects affect the dependent variable — student interests in school subjects.

It is hoped that the findings of this study will enable secondary school teachers, school administrators and the West African Examination Council to gain insights into some of the real factors that account for students' like and dislike for school subjects and consider the usefulness of the recommendations resulting from this investigation. The result of the study may enable the teachers to reconsider their methods of teaching and their attitudes towards students. It may help school administrators to understand the extent to which facilities and other conditions of learning are important in making students develop interest in subjects offered in the school. It may also help the West African Examination Council reconsider the nature of the existing syllabi for certain subjects and the conditions of the award of the West African School Certificate to candidates.

Conclusions and Recommendations:

As stated earlier the purpose of this study was to determine the popularity statuses of various subjects offered in secondary schools and to find out why students tend to like certain school subjects and to dislike others.

The findings of this investigation indicate that English language with an index of .98, Bible knowledge (.96) and Biology (.95) were the most popular subjects among boys and girls. The most disliked subjects were French (-.69), Igbo (-.33) and Geography (-.20). These findings are very much like the findings O.M. Ferron in a similar research conducted in Freetown where English language was the most popular subject. Other popular subjects in his research included scripture and Biology. But unlike the research of Thomas and Surachmad where Indonesian language was among the most popular subjects Igbo was one of the most unpopular subjects in this research.

The popularity of English language among students could be of great advantage to the teaching and learning of other subjects since the medium of instruction is English language. If teachers should adapt the content of the subject matters of various subjects to the age, and maturational

level their students, and with students' interest in English language, it is likely that students might begin to cultivate interest in those subjects that are not quite popular with then. Many psychologists, after-all, contend that interests are highly adaptable and responsive to the conditions of, and circumstances around each child. As stated earlier, for an interest to grow there should be room, time and place for it to do so, and usually some cultivating. If it is to grow, it should have the warm sun of success and approval and if it is to grow strong there should be rich rewards for various drives and purposes, with continually opening possibilities for yet further satisfaction. Thus with students' interest in English language, the medium of instruction, and with teachers setting goals that are achieveable by students in various subjects and with an ever-increasing encouragement from the teacher, no doubt interests of students in various subjects will be enhanced.

The low popularity index for Igbo does not surprise the researcher very much. The strength of any educational system depends on the quality of teachers in that system. Igbo is not yet studied in the Universities. It is recently introduced in Alvan Ikoku College of Education Owerri.

In effect, the subject is taught by unqualified, and "half-baked" teachers. These teachers cannot stimulate students into liking the subject. Since students think very much about getting the West African School Certificate they would not enter for subjects where there are no well qualified teachers. When compared with the high popularity of the Indonesian language the picture is quite different. Indonesian, like English language, is the official language of the country which makes it necessary for employment opportunities for Indonesian children. This is a great motivating factor in cultivating interest in any subject. Moreover, Indonesian can in a sense be regarded as an international language for a group of countries including Malaysia, and Indonesia. Bahasa Malaysia and Bahasa Indonesia are basically the Malay language with small variations. This international status of the language adds to the reason why it was one of the subjects most liked by the pupils.

Igbo is not the national language of Nigeria.

As the findings of this research suggest, students like subjects which have bearing with their future career or which have vocational values. They do not see in Igbo, a key to any profession or as being important for their future success in life. Hence this language was found to be unpopular among the students even though the research was conducted in the Igbo speaking area of the country.

The reasons given for liking or disliking various subjects offered in school by Nigerian students used in this study are similar to those given by Freetown students as reported by O.M. Ferron in his research. The foremost reason is the vocational value of a subject and this reason seems more important for the boys than the girls. For the boys the difficulty of a subject is as strong a factor as the vocational value of a subject while for the girls the difficulty of a subject is not a factor in making them like or dislike a subject. Probably the girls have more qualified teachers who seem to present the subjects students label "difficult" in a simplified manner.

For the girls, teachers' method of presentation and marks obtained in subjects are very strong factors in making them like or dislike a subject.

The reason for the vocational value of a subject being so strong a reason for liking or disliking a subject among boys than girls is probably that boys think more in terms of their future role as bread winners.

Unlike the researches carried out by O.M. Ferron in Freetown, Thomas and Surachmad in Indonesia, and S.E. Dean, girls in Nigeria used in this study prefered

mathematics and physics more than boys.

Apart from teacher variability which the researcher in this study advanced earlier, the researches of Marie, "Variables Associated with Curricular choices of secondary school pupils", and that of Thomas and Surachmad (Likes and dislikes of Indonesian pupils) suggest other reasons. Marie found that intellectual variables and family background to be highly related to curricular choices of students. Thomas and Surachmad argued that subjects such as Mathematics and Physics deal with such concepts that seem to involve somewhat specialized abilities. It is possible that they cause great satisfaction for successful pupils who possess these abilities and at the same time cause greater frustration for those who do not.

Therefore it is probable that the girls in this study prefered mathematics and physics more than the boys because: (1) they have better teachers (2) there were more intelligent girls than boys in the research; (3) most of the girls must have come from more enlightened homes than the boys in which case their parents must have had some influence in the interests they have for various subjects; (4) there were more girls than boys with specialized abilities in these subjects as far as this research is concerned.

Moreover cultural differences might be part of the reasons for difference in the findings of Marie, Thomas and Surachmad with the findings made in this research. There might be different opportunities for Igbo women when compared with the opportunities open to women in the researches just sited above. Igbo women have the same opportunities with Igbo men in the pursuit of future career. It is likely that the girls used in this research put in more energy than the boys in the study of these subjects labeled "difficult" - Mathematics and Physics - which might have been viewed by the girls in Marie's, Thomas's and Surachmad's researches as exclusive subjects to be pursued by men, hence the difference in the findings of their researches from the findings made in this study.

Tyler in her research, showed that ability and interest are related in boys but not in girls. She attributed these deferential finding to social role expectation associated with sex. Her resulting hypothesis was that boys have differential occupational role models which encourage the development of interests in line with their abilities, while girls' role model (house-wife) is not such as to

encourage the development of interest in line with abilities. Tyler interpreted her findings as ruling out aptitudes as a basis for interest development, but what she seemed actually to have shown is that social expectations encourage or inhibit the formative influence of aptitude.

There is nothing in this research to support Tyler's findings and argument. To determine the degree of correspondence between the slections of boys and girls the researcher used rank order correlation and found, as Greenbatt' found in his own research, that there was a high significant relationship between the subject preferences of both sexes. No doubt Home management received a low popularity index among girls in this study.

However among the Ibos where this research was conducted similar opportunities for future careers are available to both boys and girls alike. Formerly women in Ibo-land used to be called "Oriaku", meaning those whose who stay at home to consume the wealth of their husbands. Today many, if not all the women, reject that name or title and rather prefer to be called "Odoziaku", meaning those who not only keep well the wealth of the family but also contribute to the wealth of the family. Among the educated women in Ibo-land, the term, housewife is regarded as derogatory or an insult. Therefore, Tylers social role model

for women (housewife) does not adequately apply in the area where this research was conducted and in the sense she used the term (housewife).

Howard H. Mosher obtained a similar finding in his own research. He found that there was little in his investigation to indicate any sharp line of demarcation between preferences in the "aesthetic" subject area for girls and the "skills" area for boys.

In the light of the preceeding findings, the following recommendations have been made:

(1) Some consideration might be given to the possibility of core curriculum based on English language, Bible knowledge (or religious knowledge) and Biology, around which the rest of the curriculum could be made to revolve starting from primary school.

The core-curriculum, otherwise known as (a) problem-of-living curriculum (b) society-centred curriculum or (c) Social functions curriculum according to Smith et. al.[20] consists of basic values and rules by which the people govern or ought to govern their activities. By these rules they decide what is good or bad, desirable or undesirable. A Social problem or issue involves factual content, descriptive principles and socio-moral

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[20] B.O. Smith et al, Fundamentals of Curriculum Development, New York: Harcourt, Brace and World Inc., 1957, pp. 314 - 315.

rules and values. It is customary to think of social problems as being capable of solution by means of facts and descriptive principles without explicit reference to the values involved. The core curriculum rejects this view and instead makes the values of the problem, along with descriptive principles the object of study. O.M. Ferron[21] from the findings in his research recommended a core curriculum based on English, number and Natural Science around which the rest curriculum could be made to revolve starting from the primary school.

In an investigation in 1961 on factors associated with interest in science, Meyer and Penfold[22] concluded that a Science Course designed round a core of physical Sciences, is more likely to develop interest than one organised around the biological sciences. One can readily see that this might be the case on the fringe of East London where the research was conducted, but it is doubtful if this could be expected to apply to secondary school children in Nigeria, following the findings of this research.

[21] O.M. Ferron, Op. cit., p. 13

[22] Meyer and Penfold in O.M. Ferron, Loc. cit.

Of course, further experimentation would be necessary, but the available evidence suggests that both from the point of view of the national economy as well as children's interest, rather more emphasis should be placed on Biology. The interests of children in the biological life around them should be exploited to the full from as early an age as possible. Moreover, where funds are short and the provisions of adequate manufactured equipment have to be curtailed, the biology teacher has recourse to improvisation within the natural biological laboratories around or near most Nigerian Schools. Furthermore, this natural interest in Biology can be used as a foundation for work in language. If every biology teacher can also look upon himself as a teacher of English and if every teacher of English can acquire some local biological knowledge, which he can utilize in his English lessons, then something would be gained from the point of view of making the secondary school course rather more meaningful than it is at present.

Nigeria is a heterogeneous country consisting of peoples with different languages. English language is the only medium of communication by which the various ethnic groups can interact. It thus solves great Social problem. Hence it is necessary to make English language a core course for

all candidates for the West African School Certificate.

In a troubled country like ours where intolerance narrow - mindedness and discriminations have sometimes acted as powerful factors of misunderstanding and disintegration, religious knowledge, whether christian or Islamic, is very important since it preaches love for one another, forgiveness, honesty, open-mindedness and co-operation among various peoples of the world. Religious knowledge could be a strong factor in solving the problem of national unity and integration which have constituted a big social problem for the country.

It is necessary to reiterate the importance of biology per se. Nigeria is basically an agricultural country and biology not only teaches human anatomy but also about plants and crops. It should be made necessary to lay foundation for, cultivate interest in, and motivate students to take up agriculture as a future career. This is necessary when we think about the rate at which the country is increasing in population and the imminent problem of how to feed the growing population.

However, the above suggestions should not be misconstruced to mean that such important areas as mathematics and social studies are being over-looked.

(2) If we are commited to the principle of child centred education, surely we should take account in our methods of presentation, and comments made by the students themselves.

The unpopularity of such subjects as French, Igbo, Geography and History could be due to many reasons. The greatest reason may be due to their lack of application to functional social or career opportunities. To the students French is not quite functional since it is not the medium of communication in Nigeria. It is not practical to their daily lives. Igbo also is not the national language of the country and carries with it little or no job opportunities. Much of what are taught in geography and history are not oriented towards the students' immediate environment. The methods of teaching them are rarely activity - oriented. The study of geographical conditions and historical developments in Europe, Asia, America and even parts of West Africa are not felt to be practical to the students because they are not oriented towards their immediate environments. Students' are easily aroused by "here and now" oriented learnings. When the contents of subjects are much of foreign orientation, they are not functionally used by the children and hence they lack interest in them because they are not immediately valuable to the students. This is where it becomes very necessary to emphasize the introduction of social studies into Nigerian schools starting from the primary school level.

Social studies allows the student to examine himself and his own needs; creates an awareness and an understanding of the evolving social and physical environment around him. Emphasis is placed on the child's immediate environment and the functionality or immediate utilization of knowledge acquired. This is a very strong argument for moving away from the teaching of discrete subjects towards an integrated curriculum like social studies.

Biology received such a high popularity index because it is practical to life. It deals with the students' lives and the environments that are immediate to them (students). The popularity of biology presents a good argument for integrated Science incorporating Physics and Chemistry. This will definitely enhance the interests of students in studying elements of physics and chemistry.

As the findings of this study show, Bible knowledge was very popular among the students. The reasons for this popularity might be that the students attended missionary primary schools where they were inculcated with the idea of the value of Bible knowledge as being very essential in the school curriculum. Thus they find it functionally useful for it enhances their immediate application to life. When compared with the functional nature of geography and history with regard to their contents and their immediate

application to life, the subjects tend to lose popularity among students. This is understandable when we remember that the students emphasized the vocational value of a subject, its functionality or utility to practical life as the major factor in considering what subjects to offer in the West African School Certificate Examinations.

All these notwithstanding the investigator still recommends that teachers should take account of their methods of presentations; improvise and use adequate teaching aids; recognize individual differences that exist among the children they teach and minimize the tendency to treat them as homogeneous groups. Individualized instruction can go a long way to remedy lack of interests in school subjects among secondary school students. Lecture method of teaching should be minimized as much as possible and activity and project methods should be used to the uptimum for children learn more by doing than by sitting still and listening to "sermons". In teaching any subject the teachers should start from where the students are and not where they should be. This will help to reduce the difficulty that children encounter in learning various subjects.

(3) Reinforcement creates interest in learning. teachers should set tasks that are within the ability of the students to tackle and which have the probability of being successfully solved by them. Success in solving problems set by the teachers enhances pride among students and thus creates interest in learning more.

(4) At the stage when students choose subjects to offer in the West African Examinations many of them do not know the vocational values of various subjects. As much as possible teachers should explain avenues open to children in any subject they are teaching.

(5) Since future career has received much concern among student in choosing the subjects to offer in the West African School Certificate Examinations, it seems imperative to recommend the establishment of guidance counsellors in secondary schools to help the students plan their future.

(6) School administrators should provide adequate facilities necessary for learning. Increased efforts should be made to provide qualified staff for various subjects.

Igbo and other Nigerian languages should be introduced into the Nigerian universities and studied

up to degree level in order to turn out qualified teachers in our native languages. This will go a long way to remedy the unpopularity of such subjects among students.

The findings of Frymier in his research "A Study of students' motivation to do good work in School" seem very relevant in making recommendations for this study.

(8) Teachers should show interest in the subjects they teach. This interest is often copied by the students taught.

(9) Teachers should show sincere concern in the welfare of the students. When a teacher is indifferent to the well-being of students, often students tend to dislike the teacher and the subject he teaches.

(10) Grades and other forms of recognition are important in the development of interest for a subject or subjects among students.

(11) Teachers should take keen interest in the students' physical and emotional status as these have direct influence on the attitude of students towards school subjects.

(12) Teachers should ensure favourable physical factors (light, temperature, absence of distractions) in the class room.

Other recommendations include:

(13) New methods teaching, such as team teaching, should be

utilized as much as possible to minimize boredom and increase efficiency.

(14) Teacher - student planning should be adopted because of its obvious advantages:

(a) The students would be in a better position to set up ways of achieving the goals and in evaluating their progress.

(b) There is a high degree of motivation exhibited by students in learning the tasks they participated in choosing.

(c) They attack the task with great vigour since the task makes meaning to them

(d) When school time is spent in attempts to solve problems that are real to the pupils by methods that make sense to them, school work takes on a new complexion.

(e) The pupils carry out responsible assignments because the assignments are about problems they understand.

In short teacher-pupil planning is a procedure that sets the stage for interest in school subjects.

RECOMMENDATIONS FOR FURTHER RESEARCH:

Owing to limited time and funds, the researcher could not investigate all the variables involved in this study. He therefore makes suggestions for further research as follows:

(1) A study of the relationship between intelligence level and subject preferences of secondary school students;

(2) A study of the relationship between achievement and subject preferences of secondary school students;

(3) A study of the relationship between teacher preferences and subject preferences of secondary school students;

(4) An investigation into the specific reasons (pupil interviews) (content analysis) (observation of teachers) for the success and attractiveness of some subject and not others.

(5) An investigation of the societal relationships of the function of subjects and their popularity.

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APPENDIX

QUESTIONNAIRE TO BE COMPLETED BY STUDENTS IN SECONDARY SCHOOLS IN OWERRI DIVISION OF EAST CENTRAL STATE OF NIGERIA

SCHOOL ..... Class ..... SEX .....

Division ..... Date: .....

A varied number of subjects are offered in Secondary Schools. Below is a table listing the subjects and two categories of response -"Like," "Don't like", You are required to indicate with a tick (✓) which subjects you like and don't like, Thus, if for example you like History, then you should put a tick (✓) under "Like" against History, if you don't like it put a tick (✓) under "Don't like". Only one tick should be made against any one subject. In column three you are required to indicate the most recent mark you scored in each of the subjects.

Subject	Like	Don't like	Most recent mark obtained in each subject.
English language			
English literature			
Mathematics			
Physics			
Chemistry			
Biology			
Geography			
History			
Economics			
Health Science			
Political Science			
French			
Igbo			
Religious knowledge			
Home Management			

Make a list of your favourite teachers on the staff including those who have recently left the school. By favourite teacher I mean teachers who are friendly, approachable, sympathetic, gracious and relax and who you like.

In Colomun 2 make a list of most effective teachers, that is, teachers who are able to present their lessons clearly; those who have proved their ability to teach well.

Names of Teachers on the staff	Favourite Teachers	Most effective Teacher

Many factors affect students' interests in School subjects. Some factors affect some students while they do not affect others. Below are some of the factors. You are required to indicate with a tick (✓) whether a particular factor affects your interests in school subjects or not. For example if the usefulness of a subject to your future career or even if you don't pursue a career affects your interests, put a tick (✓) under "Yes" against "the usefulness of a subject to my future career or even if I don't pursue a career," if it does not affect your interests in school subjects put a tick under "No" Only one tick should be made against any one factor.

	Yes	No
1. The usefulness of a subject to my future career or even if I don not pursue a career.		
2. Teachers' method of presentation or teaching.		
3. Marks obtained in a subject		
4. The difficulty of a subject.		

Please rank the factors according to how far each one affects your interests in school subjects. The one that affects your most should have 4 points, the second should have 3 points, the third should have 2 points and the fourth should have one point (1 point). The one that does not affect your interest should have Zero put (0)

FACTORS	POINTS
The usefulness of a subject to my future career or even if I do not pursue a career.	
Teachers' method of presentation or teaching	
M rks ob tained in a subjecting.	
The diffaculty of a subject.	

Please select your most favouaite Two subjeots and given three reasons why you like them.