

Teachers' Characteristics and Students' Attitude towards Economics in Secondary Schools: Students' Perspectives

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Abstract

The study sought to find out the relationship between how students perceive their teachers' in respect of knowledge of Economics content, communication ability, use of appropriate instructional method and teachers' classroom management skills and students' attitude towards Economics. The population of the study comprised all the second year students (SS 11) in senior secondary schools in Oyo State, Nigeria. The study sample consisted of 640 students selected through cluster and simple random sampling techniques. Two instruments – Students' Perception of Teacher Characteristics Questionnaire (SPTCQ) and Students' Attitude towards Economics Questionnaire (SATMQ) were developed and administered on the respondents. A trial test of 50 students using split-half reliability test was carried out which yielded reliability coefficients of 0.86 and 0.94 for SPTCQ and SATMQ respectively. Pearson Product Moment Correlation and t-statistics were used to test the hypotheses. Findings show that the way students' perceive their teachers' in terms of knowledge of Economics contents, communication ability, teaching methods and classroom management skills has a significant relationship with students' attitude towards Economics. When the students' perception of their teachers' characteristics is low, hence students' attitude towards Economics tends to be negative.

Keywords: perception, teachers, teaching strategies, classroom management skills, students' attitude, Economics

1. Introduction

The importance of teacher characteristics in realizing educational goals and objectives in any educational system cannot be over emphasized. Teacher characteristics are the instructional behaviours exhibited by the teacher towards goal attainment. These characteristics are the combination of peculiar qualities, traits, mental or moral nature/strength and status that make one person or group different from another. Successful teachers' characteristics are those that have been found by empirical researches to be related to improved achievement by students in the cognitive, affective or psychomotor outcomes of education (Offorma, 1994). The bedrock of educational system lies on a core of devoted, knowledgeable, competent and well-trained teachers. Groton (1983) rightly pointed out that if a person is to be successful in his chosen career, that individual also needs a set of ethical beliefs or standards for guidance or direction in the appropriate use of competences. A competent teacher seeks to know his learners' behaviour during the teaching and he or she must perceive the individual learner in an holistic way since gender neutral has affective, cognitive and psychomotor talents. Also, students' participation in the instructional process is critical and their perception thereof presents methodological challenges when they are underprepared. The knowledge of the way the students think and perceive can aid the teacher to reflect upon and adjust the teaching strategies to enhance students' understanding and achievement. Allport (1968) described perception as the way people judge others with who they are in contact. A persons' attitude to an idea or object determines what the person thinks, feels and how the person would like to behave

towards that idea or objects.

Adu (2012) defined attitude as internal beliefs that influence personal actions which is learned through one's experience. This has to do with a disposition to act or react in a particular way as the individual responds to a situation (Amoo & Rahman, 2004). Thus, the students' perception of the teachers' characteristics could influence their attitude toward Economics or any other school subject. Students more often than not judge their teachers in such areas as the teachers' knowledge of the subject matter, communication ability, the choice of appropriate teaching method and the general classroom management skills. A teacher who is rated high on these indices in the perception of the students is likely to enjoy the confidence, respect and admiration of students.

In the teaching-learning process, both the teacher and the learners must be active. The learner learns through some activities while the teacher does all he or she considers necessary to make learning possible. For any society to be equipped with the basic knowledge and skills that will enable it to better appreciate the nature of economic problems, and how to make rational economic decisions, such a society must depend on the accumulated knowledge of economics, which the citizens possess. For many years, educators and researchers have debated over which variables influence student achievement. A growing body of evidence suggests that schools can make a great difference in terms of student achievement and a substantial portion of that difference attributable to teachers (Adu 2012).

The teaching of Economics provides a learner with the opportunities to live meaningfully within the changing economic world. The following are the objectives or attainable outcomes of teaching Economics:

- to equip students with the basic principles of Economics necessary for useful living and higher education;
- to prepare and encourage students to be prudent and effective in the management of scarce resources;
- to raise student respect for the dignity of labour and appreciation of economic, cultural and social values of our own society; and
- to enable students to acquire knowledge for the practical solution of the economic problems of the society, such as Nigeria, developing countries and the world at large.

From the highlighted objectives, the question is often asked: Why study Economics? To provide an answer, Adu et al. (2009) put forward the identified reasons:

- the study of Economics enables a student to understand the nature of the complexity of the economic activities in which he is only a very small part.
- It enables students to understand and appreciate various government policies where choices have to be made such as probably to spend more money on free education and therefore provide less employment opportunities.
- the study of Economics provides the students with basic skills for analysing Economic problems thereby preparing them better for positions where economic decisions have to be made

The study of Economics helps a government to promote growth and development therefore improving the quality of life of the citizens.

- Knowledge of Economics is useful to analyse fascinating patterns of socio-economic behaviour.
- the study of Economics is useful to understand and alter the inequalities in the distribution of income and opportunities. (Adu, 2012)

In view of the above, every society is faced with three fundamental Economic problems: What to produce? How to produce? And for whom to produce? These problems can find solutions through Economics and possibly are solved through the study of Economics. Economics has been widely accepted by many countries to the extent that many students are now writing examination in this particular subject at the end of their Senior Secondary school level. In other words, the necessity for Economics as a foci teaching and learning subject from school level is an indication that Economics has a significant impact on the student as a knowledgeable citizen of society.

1.1 Knowledge of Subject Matter

Fennema and Frank (1992) agreed that teacher's knowledge of the subject matter is an indicator of teachers' teaching effectiveness. Eggen and Kauchak in Adediwura and Tayo (2007) sub-divided teachers' knowledge of subject matter into categories: knowledge of content, pedagogical content knowledge and general pedagogical knowledge. Ball and Bass (2000) had earlier explained that knowledge of Mathematics and Economics itself (knowledge of subject matter) should go further than the specific content of the discipline to the knowledge of *how* to teach, present mathematical and economic concepts and that of selection and use of instructional media and resources. Muijs and Reynolds (2002) posited that the teaching effectiveness of the teacher is hampered if he/she is not well versed in the contents to be

taught. A teacher who has a deep understanding of the concept to be taught is more likely to use unambiguous language; their presentation is likely to be more coherent and they would offer clearer explanation than those with a weaker background, (Uya, 2011). Adu (2012) in his finding on importance of Economics teachers' knowledge of subject contents, affirm that effective teaching that can lead to better achievement by the students and provide a positive attitude. This depends on the teachers' confidence and in-depth knowledge of the subject matter.

1.2 Communication Ability

No subject matter can be learnt properly without the appropriate disciplines vocabulary and communication thereof, the use of the disciplines in its appropriate terms facilitates the required knowledge and understanding of whatever is being learnt. Communication may be used to mean the transfer, transmission or exchange of ideas, knowledge, beliefs, attitudes or emotion from one person or group of persons to another (Esu, 2004). Ajibade and Ehindero (2000) opined that if there is any act germane to effective teaching it is that of communicating. Teachers should strive to make their presentation as unambiguous, coherent and logical as possible. Eggen and Kauchak (2001) underlined the basic aspects of effective communication to include precise terminology, connected discourse, transition signals and emphasis. Afangideh (2001) reported that the purpose of communication in the teaching-learning process is to effect change, to produce a desired response; or to influence action contributing to the welfare of the school system. Afangideh (2001) further highlighted four dimensional objectives of communication as: to inform, to stimulate, to persuade and to remind. Uya (2011) asserted that the effectiveness of any educational system depends to a large extent on the effectiveness of the communication system being adopted. And that the teacher has the capability to change the attitude of another person if there is trustworthiness, belief and validity of what he says. To a large extent the effectiveness of any classroom interaction and/or activity is determined by the competency of the teacher to initiate and sustain communication between and among their students. (Ahmad, 2009)

1.3 Teaching Method

The use of appropriate teaching method incorporates an ordered way of accomplishing an end or performing a task. Adu and Adeyanju (2013), described methods as systematic patterns to be followed in the teaching/learning process to drive home a point. Whether in, formal or informal education, teaching method effectiveness makes for retention of learnt concepts. The extent to which an instructional procedure is potent depends greatly upon its effective use by the instructor and the impression it leaves on the learner, which is usually evident in their attitude as well as performance (Obanya, 1984). Umoren (2001) in a research on methods of teaching suggested that the ability of the teacher to impart knowledge so depends greatly on the method he applies during the teaching learning process. Where the method is defective, the students stand to lose as they do not benefit from lessons. According to Uya (2008), for the teacher to be able to ensure order and enhance classroom learning, they have to possess necessary pedagogical skills which have to be systematic and methodical. They have to explore and make good use of their knowledge of instructional skills/strategies, whether the method adopted falls within the spectrum of mass or individualized instructional methods (Umoh, 2005). Adu (2013) opined that teaching, by its nature requires a variety of methods to facilitate teaching/learning in the class and to develop the student's knowledge and understanding to the maximum.

1.4 Classroom Management Skills

Classroom management is the process of leading, directing, ordering or restraining of students in a class in a way that will lead to effective learning. Byrne, Hattie and Fraser (2001) observed that students will perform best in a controlled atmosphere that is conducive to academic and social needs of the students. The atmosphere in the classroom needs to be relaxed, free from threats and anxiety, non-competitive and thought provoking to allow students participate and enjoyment of the lesson. In such an atmosphere the students' interest *in* and attitude *towards* the subject taught could be enhanced. Isangedighi (2007) stated that disciplined behaviour in the class is the student's ability to exercise self-control under a given classroom condition. Udofot (1995) explained that while the classroom serves as a theatre stage for learning, the prevailing management and discipline are strong determinants of successful learning and commensurate outputs. Thus the goal of effective classroom management is to have students display appropriate behaviour during class activities in order to enhance the teaching and learning process that can lead to the attainment of set objectives. Teacher's characteristics in instructional delivery are therefore a measure of the teacher's ability to apply professional skills in a teaching/learning situation. The question in this study could then be asked: To what extent do teachers'

characteristics influence students' attitude towards Economics.

1.5 Statement of the Problem

Students' impression is that Economics is difficult by its very nature, and that Economics is highly structured and so abstract that it requires special intellectual talents. Thus, students see the subject as something esoteric that is to be feared (Adu 2005). The consequences of students' negative attitude towards Economics could be the persistent poor performance in Economics in the West African Examination Council (WAEC) examinations, the National Examination Council (NECO) examinations and the General Certificate in Education (GCE) examinations in recent years in Nigeria. The negative attitude and poor performance produced has continued to subject teachers to criticisms of poor characteristics and the lack of necessary professional qualification (Adu and Emunemu 2008). This study sought to investigate the perception of students with respect to their teachers' characteristics- knowledge of Economics contents, communication ability, use of appropriate teaching methods and classroom management's skills - as they influence students' attitude towards Economics.

1.6 Hypotheses

The following hypotheses were tested at 0.05 significant levels:

1. There is no significant relationship between how students perceive their Economics teachers' knowledge of Economics contents and their attitude towards Economics.
2. There is no significant relationship between students perception of their Economics teachers' communication ability and their attitude towards Economics.
3. There is no significant relationship between students' perception of their Economics teachers' ability to use appropriate instructional method and their attitude towards Economics.
4. There is no significant relationship between how students perceive their Economics teachers' classroom management skills and their attitude towards Economics.

2. Methodology

The ex post facto correlational design was adopted for the study. The population consisted of all the senior secondary school two (SS11) students in the public senior secondary schools in Ibadan, Oyo State in Nigeria. The cluster and simple random sampling techniques were adopted in drawing the sample of the study which was 640.

2.1 Instrumentation

Two research instruments were developed and used for the study. These were 1) Students' Perception of Teacher's Characteristics Questionnaire (SPTCQ) and, 2) Students' Attitude towards Economics Questionnaire (SATMQ). The SPTCQ consisted of 36 items on teachers' characteristics and the SATMQ contained 18 items on students' attitudes.

2.2 Validation and Reliability of the Instruments

The copies of the questionnaire were critiqued for face validity by asking experts in curriculum studies and educational evaluation departments to review the items. This led to the correction of some grammatical expressions, re-structuring of some items and outright cancellations of others. Fifty (50) students were drawn outside the sampled area, and a split-half reliability test used to determine the reliability coefficient of the instruments SPTQ and SATMQ. The scores from the two sets were correlated using Pearson Product Moment Correlation Analysis and corrected with Spearman – Brown Prophecy formula. This gave the reliability coefficients of 0.86 and 0.94 for SPTCQ and SATMQ respectively, indicating that the instruments were good enough for the study.

2.3 Administration of the Instruments and Scoring

The questionnaire was the main instrument used for data collection. These instruments were administered personally by the researchers in each of the sampled schools with the help of some teachers as assigned by the school authority after permission was granted. The respondents were advised to be honest in their response as information obtained would be

treated with all amount of confidentiality and used only as data for the research work. The items in the questionnaire were sorted out according to the variables they were designed to measure. Positive items were rated from strongly agree (4), agree (3), disagree (2), and strongly disagree (1), while negative items were scored in the reverse order of strongly disagree (4), disagree (3), agree (2) and strongly agree (1). Data collected were analysed using Pearson Product Moment Correlation Coefficient (r) and t-statistics were used to determine the level of influence of teacher characteristics on students' attitudes.

3. Results

3.1 Hypothesis 1

Table 1. Mean value, Pearson Product Moment Correlation Analysis and t-statistics of how students perceive their teachers knowledge of Economics contents and their attitude towards Economics

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r	t
Perception of Students about teachers' Knowledge of Economics contents(x) Students' Attitude (y)	9501 (2.47) 28700	144485 1310553 (2.49)	434703	0.96*	85.73

*Significant at 0.05 alpha level; *High relationship, Average mean= 2.50; df = 638; r-value= 0.08; t-value= 1.96; N = 640

Table 1 shows that the way students perceive their teachers' knowledge of Economics content is high and relates positively with their attitude towards Economics (r=0.96). Also, the mean value for teachers' knowledge of the subject matter and students' attitude are 2.47 and 2.49 respectively. Comparatively, these scores fall below the average mean of 2.50. The result indicates a low student's perception of their teachers' knowledge of Economics contents and a correspondingly negative attitude of students towards Economics. Table 1 further show that the calculated r-value (0.96) is higher than the table value of r (0.08) at 95 percent confidence level. Also the calculated t-value of 85.73 is higher than the table value of 1.96 indicating that the null hypothesis that had predicated no significant relationship between the way students perceive their Economics teachers' knowledge of Economics contents and their attitude towards Economics is rejected.

3.2 Research Hypothesis 2

Table 2. Mean Value, Pearson Product Moment Correlation Analysis and t-statistics of the way students perceive their Economics teachers' communication ability and their attitude towards Economics

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r	t
Perception of Students about teachers' Communication Ability (x) Students' Attitude (y)	8330 (2.16) 28700 (2.49)	144623 1310553	400013	0.91*	55.74*

*Significant at 0.05 alpha level; *High relationship, Average mean= 2.50; df= 638; r-value= 0.08; t-value = 1.96; N = 640

Table 2 shows a high and positive relationship between teachers' communication ability and students' attitude towards Economics (0.91). Also, the mean value of how students perceive their Economics teachers' communication ability and students' attitude are 2.16 and 2.49 respectively. Comparatively these scores fall below the average mean of 2.50. The result shows that students' perception of teachers' communication ability is low and correspondingly students' attitude towards Economics is negative. Analysis reveals in Table 2 that the computed r-value (0.91) is higher than the table value of r (0.08) at 95 percent level of confidence with 638 degrees of freedom. Also, calculated t-value (55.74) is higher than the table value of t (1.96) indicating that the stated hypothesis that had speculated that the way students perceive their Economics teachers' communication ability does not relate significantly with their attitudes towards Economics is rejected.

3.3 Research Hypothesis 3

Table 3. Mean value, Pearson Product Moment Correlation Analysis and t-statistics of how students perceive their Economics teachers ability to use appropriate instructional method and their attitude towards Economics

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r	t
Perception of Students about teachers' use of appropriate instructional method Students' Attitude (y)	8109 (2.13) 28700 (2.49)	115221 1310553	381258	0.89*	49.05*

*Significant at 0.05 alpha level; *High Relationship, Average mean= 2.50; df= 638; r-value= 0.08; t-value= 1.96; N= 640

Table 3 shows that student's perception of their teachers' ability to use appropriate instructional method relates positively with their attitude towards Economics (0.89). Also, the mean value for teacher's use of appropriate teaching method and students' attitude are 2.13 and 2.49 respectively. These scores fall below the average mean of 2.50. The result shows that the students' perception of their teachers' use of appropriate instructional methods is low and correspondingly students' attitude towards Economics is negative. Table 3 further shows that the calculated t-value of 49.05 is higher than the table t-value (1.96). Therefore, the hypothesis that postulated no significant relationship between teachers' use of appropriate teaching methods and students' attitude is rejected.

3.4 Hypothesis 4

Table 4. Mean value, Pearson Product Moment Correlation Analysis and t-statistics of the way students perceive their teachers' classroom management skills and their attitude towards Economics.

Variables	Σx Σy	Σx^2 Σy^2	Σxy	r	T
Perception of Students about teachers' Classroom Management Skills (x) Students' Attitude (y)	8332 (2.43) 28700 (2.49)	131312 1310553	421513	0.89*	49.05*

*Significant at 0.05 alpha level; *High Relationship, Average mean= 2.50; df= 638; r-value= 0.08; t-value = 1.96; N = 640

Table 4 shows that the way students perceive their teachers skills in classroom management relates positively with their attitude towards Economics (0.89). Also, the mean value for teacher's classroom management skills and students' attitude are 2.43 and 2.49 respectively. These scores fall below the average mean of 2.50. The result shows that the way students think of, or perceive their teachers' skills in classroom management is low and correspondingly their attitude towards Economics is negative.

Furthermore, Table 4 indicates that the r-cal of 0.89 is higher than the table value of r (0.08) at 0.05 alpha levels with 638 degrees of freedom. Also, the calculated t-value (49.05) is higher than the table value of t (1.96) indicating that the hypothesis that there would be no significant relationship between the way students perceive their teachers' skills in classroom management and their attitude towards Economics is rejected.

4. Discussion of the Findings

The result of the data analysis indicates that the way students perceive their Economics teachers' knowledge of Economics content relates significantly with students attitude towards Economics in secondary schools. This finding is supported by findings of an earlier study by Ajibade and Ehindero (2002) who reported that 98% of students totally depend on the knowledge of the content(s) of the subject by their teachers. This is as a result of the competence and confidence the teacher exhibits in his/her teaching. This implies that teachers must possess a deep understanding of the content of what they intend to teach. The perception by students that their teachers possess a deep understanding of the contents of Economics topics they are teaching is capable of engendering confidence in the students. These students may start thinking that they could also study and know Economics as their teachers, and that Economics knowledge is not esoteric in any way. In sum, it is overall dynamism of the teaching knowledge that has a significant and positive impact

on students, as a motivator towards the subject.

Analysis of teachers' communication ability and students' attitude towards Economics indicates a significant relationship. This finding is in line with the assertion of Afangideh (2001) who reported that any educational system depends to a large extent on the effectiveness of the communication system being adopted. And that no single subject can be learnt properly without communication; the use of its appropriate terms facilitates the understanding of whatever is being learnt. How successful any classroom interaction would be is determined by the competence of the teacher in initiating and promoting effective communication between and among their students. This implies that teachers should endeavor to make their speech and presentation unambiguous, coherent and logical for the students to understand and follow the content presented through the application of tasks. Effective communication clears ambiguities, simplifies concepts and clarifies principles. This could lead to deep learning on the part of the students, and as students learn they develop a sense of achievement, satisfaction and growth in the content knowledge of Economics that can be applied as a learnt skill. This would engender a more favourable students' disposition towards the subject matter learned.

The finding also indicates that the attitude of students towards Economics learning is significantly related to how they perceive their teachers ability to employ appropriate instructional methods. The outcome of this finding is based on the fact that teachers who make use of different instructional methods in lesson delivery are likely to achieve a set goal, and the concept would be properly learned by the students. Esu (2003) opined that teaching by its nature requires a variety of methods and that the importance of having a variety of methods during a lesson delivery is to enable the teacher to carry every student along. Umoh (2005) calls for teachers to be systematic and methodical, as mentioned earlier in this paper. Teachers of Economics should have extra responsibility of being innovative, employing varieties in their instructional delivery to keep their students actively engaged and prepared to react positively and learn to apply the economic knowledge in a proficient way. When students feel or perceive that their teachers are adopting appropriate methods to teach them, they become more actively involved in the teaching/learning process. Learning is known to be an active process; the more the students are actively involved the more they learn, and the more they develop a positive attitude towards what they learn and how they apply the knowledge and skills insightfully.

Furthermore, data analysis indicates that the way students perceive their teachers' skills in classroom management relates significantly with their attitude towards Economics. The outcome is based on the fact that when teachers provide conducive learning environment that is disciplined and orderly, it will promote positive learning attitude for the students. Udofot (1995) in an earlier study found out that a classroom serves as a theatre stage for learning, the prevailing control and discipline are strong determinants of successful learning and commensurate output. The nature of the lesson atmosphere depends on how the teacher teaches. When the teacher is firm and fair, he creates a better classroom climate with minimum tension and anxiety and the students are able to perform better. These climates lead to motivation, positive attitude and interest for Economics.

The results of this study underscore the need for teachers to earn the respect and confidence of their students through the display of deep knowledge of the subject matter they teach, good communication and effective instructional strategies and classroom management. These competencies promote students positive attitude towards their school subjects and hence academic achievements.

5. Conclusion

The result of this study indicates that teachers characteristics – knowledge of the content to be taught, communication ability, ability to employ appropriate instructional strategies and competence in classroom management, relate significantly with students' attitude towards Economics. Teachers' characteristics are positively correlated with students' attitude towards Economics. When students' perception of their teachers' characteristics is low, it could result in their negative attitude towards Economics and vice versa. Economics teachers should therefore strive to exhibit sound and effective pedagogical traits to earn their students' high perception. This will then engender students' positive attitude, knowledge and skill application towards Economics. As students' attitude improve, so will their commitment to the subject and their achievement will therefore be enhanced.

6. Recommendations

On the basis of the findings of the study; it is recommended that:

1. Teachers of Economics should periodically be given opportunities to update their knowledge through in-service training and retraining courses to increase their knowledge base in their subject area. This will strengthen their use of technological resources as contemporary methods of teaching and learning.

2. Teachers should adopt good communication techniques through verbal and non-verbal means that would attract students' attention and enhance effective communication during lesson. This will foster relationships of mutual respect in a non-threatening teaching and learning environment.
3. More than one teaching method should be appropriately adopted in a single lesson presentation by a teacher so as to embrace learner diversity and or barriers to learning through multi-modal presentations, create variety, minimize boredom and enhance active interest in what is being taught and learnt.
4. Teachers should create good classroom management strategies, to ensure democratic, disciplined and conducive learning atmosphere before, during and after every lesson as far as transferring positive knowledge, skills and attitudes learnt in Economics into other school subjects.

References

- Adu, E. O. (2012). Two Problem Based Learning Strategies for Teaching Economics. LAMBERT Academic Publishing. ISBN 978-3-659-13539-0
- Adu, E.O. & Adeyanju, H.I. (2013). Home and School Factors as Determinant of Students' Achievement in Senior Secondary School Economics in Botswana ARPN Journal of Science and Technology. Vol. 3, No. 2 Pp. 219-223
- Adu, E.O. (2013) Effective and Creative Teaching of Economics in Schools. In M.A.Araromi; O.A.Moronkola & J.A. Ademokoya (Eds). Teaching and Evaluation in Regular and Special Secondary School. (An effective and creative approach) Royal People (Nigeria) Ltd. Ibadan. Pp. 346-364
- Adu, E.O. (2005). Economics Education in Nigerian Secondary Schools. In Ayorinde Dada; Alade Abimbade & Olusegun Olaniran Kolawole (Eds). Issues in Language, Communication and Education. Constellation Books Nigeria. Pp. 304- 309
- Adu, E.O. & Emunemu, B.O. (2008) Relative Effect of Concept Mapping and Problem Solving on Students' Academic Performance in Economics. Journal of African Research Review Vol. 2, No.1 Pp. 109-123
- Afangideh, M. E. (2001). Communication in teaching learning process. In D. U. Umoren & C. M. Ogbodo (2007). *A handbook in teaching profession in Nigeria*, 144-156. Uyo: Guidepost Publishers.
- Ahmad, F. (2009). Students' perception of the teachers' teaching of literature communicating and understanding through the eyes of the audience. *European Journal of social sciences*, 7(3), 3-15.
- Ajibade, Y. A. & Ehindero, O. J. (2000). What our students say about how we teach. *Ife Journal Education Studies*, 7(1), 1-9.
- Allport, G. W. (1968). *Pattern and growth in personality*. London, William Clowes and sons Ltd.
- Amoo, S. A., & Rahman, M. A. (2004). Secondary school students' attitudes of learning mathematics in the world of information technology. Implication for mathematics teachers and teacher preparation. In *Proceeding of the 42nd Annual Conference of the Science Teachers Association of Nigeria*, 178-182. Ibadan. Heinemann.
- Ball, D. L., & Bass, H. (2000). Interweaving content and pedagogy in teaching and learning to teach: Knowing and using mathematics. In J. Boaler (Ed), *multiple perspectives in mathematics of teaching and learning*, 83-104. Westport, Conn: Ablex publishing.
- Bryne, D. B., Hattie, D. A., & Frazer, B. J. (2001). Students' perceptions of preferred classroom learning environment. *Journal of Educational Research*, 80(1), 10-16.
- Eggen P., & Kauchak, D. (2002). Strategies for teachers: Teaching content and thinking skills (4th ed.). In: A.A.
- Esu, A. E. O. (2003). Teaching of social studies in primary school. In A. E. O. Esu & E.P. Nkuidem (Eds.), *Fundamental of Elementary Education*. Calabar, Helino Associates.
- Esu, A. E. O. (2004). Competences for effective teaching. In S.C. Uche & I.O. Enukola (Eds), *Professional skills for effective teaching*. Aba: AAU Publishers.
- Fennema, E., & Franke, M. L. (1992). Teachers' knowledge and its impact. In: D. A. Grouws (Ed.) *Handbook of research on mathematics teaching and learning. A project of the National Council of Teachers of Mathematics*, 147-164. New York: Macmillan
- Gorton, R. A. (1983). *School administration and supervision leadership: Challenges and opportunities*. USA, Brown publishers limited. Retrieved March 4, 2011, from www.alibris.com/search/books/isbn/9780697062468
- Huckstep, P., Rowland, T., & Thwaites, A. (2003). *Primary teachers' mathematics content knowledge, what does it look like in the classroom*. Retrieved January 16, 2011, from www.Scribd.com/doc/22550939/journal
- Isangedighi, A. J. (2007). *Child psychology: Development and Education*. Calabar: Eti-Nwa Associates.
- Muijs, D., & Reynolds, D. (2002). Teachers' belief and behaviours: What really matter? *Journal of classroom, interaction*, 37(2), 3-15.
- Obanya, P. A. I. (1984). *General methods of Teaching*. Lagos: Macmillan publishers Ltd.
- Offorma, G. C. (1994). *Curriculum implementation and instruction*. Onitsha: Uniworld Educational publishers (Nig.) Ltd.
- Udofot, M. A. (1995). *Current trends of teacher Educational practices*. Uyo: Imasons Educational services.
- Umoh, M. U. (2005). Implementing social curriculum through pavlovian and Skinnerian learning strategies. *Nigeria Journal for Curriculum Studies*, 12(2), 32-36.
- Umoren, D. N. (2001). The concept of education: Meaning and aims. In D. N. Umoren & C.M. Ogbodo (2007), *a handbook on teaching profession in Nigeria*, 9-14. Uyo: Guidepost Publishers.
- Uya, A. O. (2008). The effects of use of computer as teaching strategy on secondary school students' achievement in trigonometry in Oron Local Government Area. *Unpublished project*, University of Uyo, Akwa Ibom State.
- Uya, A. O. (2011). Teacher's characteristics and students' attitude towards mathematics in senior secondary of Oron Federal constituency of Akwa Ibom State. *Unpublished M.Ed. Dissertation*, University of Uyo. Akwa Ibom State.