



PARENTAL VIEWS AND EXPECTATIONS OF THE BASIC SCIENCE AND TECHNOLOGY CURRICULUM: A NEED FOR ITS REVIEW?

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ABSTRACT

This study describes what parents view and expect from the Basic science and technology curriculum with respect to computer studies and Basic science. The research design used in this study was phenomenology qualitative research. Critical case purposeful sampling technique was adopted to select parents with real experiences of the phenomena under investigation. In-depth interviews were conducted among ten parents working in higher institutions within Mainland metropolitan area of Lagos state, whose children are in basic education level or just recently completed basic education. To ensure reliability of the unstructured interview protocol used, a pre-study survey was conducted and epoche of the researchers' opinions was observed. Two research questions were raised in the study. The data collected were presented in textural descriptions arranged in themes, altogether eight themes were generated. Data explication indicated that among others that parents view the curriculum as being relevant in helping children develop enthusiasm; but the curriculum is too voluminous and the composite subject could be unmerged or allocated more time on the timetable. The parents expect a review of the curriculum to address the emerging issues like pandemic and insurgency. The parents also expect that the curriculum be garnished with more practical works that will birth creative thinking in children.

Keywords: Parental views, Parental expectations, Curriculum review, Phenomenology, Data explication

INTRODUCTION

The functionality of curriculum in national development is as a heart to human body. A robust, functional, effective, exhaustive and relevant curriculum should be sensitive to the need of the nation it seeks to meet. As needs of every nation may have salient differences, these differences should necessitate the content of the curriculum. Literature is replete with a plethora of opinions and definitions of what a curriculum is. Igwe

(2007) describes curriculum as all the learning experiences given to the students; and that the curriculum is the total guided learning experiences designed to facilitate learners learning for establishing quality relationship between what is learnt and what operates outside the school. Danmole (2011) defines curriculum as a structured plan of action that guides the process of education. Curriculum can be viewed as a set of objectives, courses of subject or content, plan, document, experiences, process (Shao-wen, 2012). The curriculum can be perceived as a sandwich between the society and learner; therefore, it should be Society and Learner sensitive (Danmole, Olayanju and Ahmed, 2017). In the words of Braslavsky (2003), the curriculum is the "existing contract between society, the State and educational professionals with regard to the educational experiences that learners should undergo during a certain phase of their lives".

In Nigeria, every child is expected to go through basic education which spans for nine years. Several subjects are taught during these nine years to the learners; these are Mathematics, English, Business Studies, Cultural and Creative Arts, Home Economics, Agric Science, Yoruba, French, and Basic Science and Technology. The Basic Science and Technology (BST) is an amalgamate of four composite subjects; these are: Basic science, Computer studies, Basic technology and Physical health education. BST curriculum is prepared in a thematic approach to take care of the needs of the learners. With the emerging needs of the nation, the BST cannot be less responsive in times like these.

As mentioned earlier, every curriculum should be learner and society sensitive. Parents form part of the clients of the curriculum, they are an integral part of the society, they are responsible for the release of their children for schooling (especially at the basic level of education), they cater for the funding of the school fees (for learners in the private school), other school levies, books, school uniforms and other welfare needed for

the child's schooling. Also, parents are usually one of the first partakers of either the "dividends or disappointments" emanating from whatever the child is exposed to at school especially the curriculum. Palfy, McFeeters, and McGarvey (2020) describe parents as intellectual resources and important partners in education that have a lasting impact on students. Every responsible parent has expectation for his child.

There are myriads of definitions of parental expectation in literature. Parental expectation is viewed as parents' realistic beliefs and judgments about their children's future achievements as reflected in course grades, how far their children will go in school, expected highest level of education (Yamamoto and Holloway, 2010; DiBartolo & Rendon, 2012). Parental expectation is seen as the desire of parents towards their children's lives which include academic, career or other achievements related to the future (Seginer, 1983; Furry and Sy, 2015). Various studies identified parental expectation as having link with their children's motivation to achieve in school, social resilience, aspirations to attend higher institution, obtaining high grades, to achieve high scores on standardized tests, ability to persist longer in school and student's ability self- concepts (Bandura, 1997; Philipson and Philipson, 2007; Englund, Luckner, Whaley, and Egeland, 2004; Lindberg, Yildirim, Elvan, and Ozturk, 2019; Stern, 2019). For instance, Philipson and Philipson (2007) in a study of 158 parents from two Chinese and one Anglo-Celtic origin whose children are in primary schools; found parental expectation to be a consistent predictor of their children's academic achievement. Parental expectation for their children's science education was not only important for predicting school achievement, but also influences the children's later career decisions" (Bleeker and Jacobs, 2004). A study by Froiland, Peterson and Davison (2013) suggests that parents' expectation for their children is a strong predictor of academic achievement in children; and that early parental expectation for children's post-secondary educational goals had a strong effect on eighth grade achievement. With parental expectation having

such a lasting and strong impact on students, rather than dismiss, Palfy, McFeetors, and McGarvey (2020) advocate that teachers and researchers deepen their understanding of parental expectations and engage with parents to work alongside them in supporting their children's mathematics learning.

Parental view as a variable is not as popular in literature as other parent-related variables such as parental concern, parental involvement, parental support and parental expectation. Generally, views are synonymous with perceptions. Hirsch and Smith (2010) present parents' views as parents' opinions. However, with the need to examine how parents adjudge the present BSTC, this study considers the pertinence of investigating parents' views as it relate to the BSTC. This study conceptualizes parental views as encompassing parents' thought, appraisal, perception and judgment of what the basic science and technology curriculum (BSTC) is all about, and its observed impact on their children since the exposure of their children to BSTC. While parental expectation in this study implies the impact that parents desire and anticipate of the BSTC on their children; these impact include academic, social, acquiring propositional knowledge, procedural knowledge, epistemic knowledge, skill acquisition and relevance to real life.

Although, all parents may not be privy to documented copies of the BSTC but they are recipients of the various learning outcomes displayed by the children at home. For example a child who was taught in school on how a computer system can be infected with virus; gets home, sees his parent who wants to insert a flash drive into the laptop at home and, asks his father curiously "Daddy, does your laptop have an antivirus software?" The father answers "No. Why did you ask?" The child answers "If your laptop does not have an antivirus software that can help scan the flash drive when inserted into it, and if the flash drive does not have an antivirus software itself, but the flash drive has virus, the flash drive can infect the laptop with

corrupt programs that are called virus, this exposes all files in the laptop to danger." From this conversation; though, the parent does not have documented copies of the BSTC, from the learning outcome displayed by the child, the parent can infer that learning on how a system can be effected and prevented from been corrupted. Similarly, a learning outcome can be seen in a child that raises a discussion with her parent on why water from their well at home does not lather easily with soap, the parent can deduce that the child has been taught water hardness at school.

Statement of the Problem

Groaning and dissatisfaction can be read from many parents in Nigeria of over-burdening children at the basic level of education with assignments that are seemingly above them; and sometimes the parents will be the ones doing the assignments or engage the service of a home tutor. Some of the parents' complaints are that despite all these rigors, there are little or no jobs awaiting the children after several years of schooling. Perhaps, these complaints might have received succor if unemployment was not having its fun time with many graduates. Since class work, assignment and various learning activities cannot be divorced from the curriculum, one is compelled to ask that "for whom was the curriculum actually prepared?" The concern of this paper is to investigate the views and expectations of parents with respect to the BST curriculum with the view to addressing the needs of: acquiring propositional knowledge, procedural knowledge, epistemic knowledge, skill acquisition and relevance to real life; and very importantly which aspect of the curriculum should be reviewed or dropped at the basic level.

Purpose of the Study

This study investigated parents' expectations and views of the Basic science technology curriculum in Shomolu and Mainland local government areas of Lagos state. More specifically, it sought to find out:

1. How parents view basic science technology curriculum with respect to Basic science and ICT.
2. Parents' expectations of their children's exposure to basic science technology curriculum with respect to Basic science and ICT.

Research Questions

1. How do parents view basic science technology curriculum with respect to basic science and ICT?
2. What are parents' expectations of their children's exposure to basic science technology curriculum with respect to basic science and ICT?

Research Design

This study is a psychological phenomenology qualitative research that centers on exploring parents' "views or perception of the BSTC" and "their expectations of the BSTC". Phenomenology was adopted to "provide a theoretical element that will help develop a framework of categories to illustrate the range of participants' perceptions of their experiences" (Palfy, McFeetors, and McGarvey, 2020) of the BSTC. Also, phenomenology research design was chosen to enable the researchers describe what parents whose children are offering basic science and technology or have recently completed basic science and technology curriculum, "have in common as they experience a phenomenon" (Creswell, 2013); the phenomena in this case are: parental view and expectation of the BSTC.

Population, Sample and Sampling Technique

Parents in Mainland metropolitan area of Lagos state whose children are in the basic level of education or just recently completed basic level of education constituted the population of this study. The sample is made up of parents working in higher institutions within Mainland metropolitan area of Lagos state, whose children are in basic education level or just recently completed basic education. Purposeful sampling

technique was used to select the parents who participated in this study. More specifically, critical case purposeful sampling was adopted to select the sample for this study. This was to ensure that qualitative data were collected from parents with real experiences of the phenomena under investigation. A pre-study survey was conducted to identify parents with not less than moderate awareness of the BSTC curriculum. Thereafter, ten parents who indicated not less than moderate awareness of the BSTC curriculum, and willingness to participate in the study were selected to participate in the study.

Table 1: Demographic data of participating parents

| | | | |
|--|-------------------|---|----|
| No of parents | Male | 4 | 10 |
| | Female | 6 | |
| Level of BSTC awareness | moderately aware | 1 | 10 |
| | very aware | 8 | |
| | excellently aware | 1 | |
| Highest Educational qualification of parents | B Sc. | 3 | 10 |
| | M Sc. | 6 | |
| | Ph.D | 1 | |

Research Instrument and Data Collection

Two research instruments were used for collecting data in this study. Principally, an un-structured interview protocol was used to collect qualitative data; while a structured questionnaire was used to conduct a pre-study survey among the parents who were intending participants of the study. The interview protocol had two major questions and ten sub-questions that were targeted at probing into what the parents' views of the BSTC are; and, what the parents' expectations are of their children's exposure to the BSTC. The questionnaire was a subsidiary research instrument designed by the researchers to identify parents with not less than moderate awareness of the BSTC curriculum. Section A of the

questionnaire was designed to collect parents' demographic data, this include: gender, type of occupation, highest educational qualification and children's level of education. Section B of the questionnaire had items rated on a likert scale to determine parents' level of awareness of the BSTC. This was to ensure that the parents who participated in the study actually have life experience of the BSTC. Only parents with moderate and excellent levels of awareness were involved in the actual study. Before the study began, parents' informed consent was sought to ensure that they were willing to participate in the study. The parents were interviewed individually and given ample time to express their opinion. With the challenge of COVID-19 pandemic, parents were given the choice of physical or virtual interaction for interview.

Validity and Reliability of the Data Collection

The interview protocol and questionnaire were given to three science education experts for construct and content validation after which corrections were made. The methods of reliability adopted in this study were: bracketing researchers' personal experiences and conducting a pre-study survey. The researchers' opinions and personal experiences were bracketed to promote unadulterated results by reducing as much as possible, interference of the researchers' experiences and that of the parents who participated in the study. The pre-study survey was conducted on the sample to determine parents who actually have real experiences of the basic science and technology curriculum with their children. Their responses guided the researchers on those who participated in the interview.

Data Explication

In this study, Hycner (1999)'s method of data explication was adapted in analyzing the qualitative data obtained from participants' transcripts (interview response). An epoche was observed where the researchers' personal opinions were bracketed as much as possible. From each

transcript of the interview; significant phrases, statements and quotes were identified; and meanings were thereafter formulated by the researchers. The formulated meanings were clustered into themes allowing the emergence of themes common to all participants' transcript. The results were then integrated into a comprehensive, thorough and textural description of the experiences of the participants in BSTC, these are presented in tabular form. Some of the steps for data explicitation indicated above are not largely at variance with Creswell (2013); King (1994); Moustakas (1994) and Groenewald (2004) in analyzing data obtained from phenomenological qualitative research. However, since this study is phenomenological, the researchers preferred the sub-title "data explicitation" rather than "data analysis". This is because "data explicitation" aims at investigating constituents of a phenomenon while keeping the context of the whole rather than "data analysis" that seeks to a transform data, break the data into parts' and has likelihood of losing the whole phenomenon (Hycner, 1999).

Research question 1: How do the parents view basic science technology curriculum?

From 10 transcripts, 38 significant statements on parents' views on basic science curriculum were extracted. Table 1- 2 include examples of significant statements with their formulated meanings. Arranging the formulated meanings into clusters resulted in 4 themes.

Theme 1: Too Voluminous Content.

Parents through different expressions and statements opinionated copious and profuse BSTC. Parents whose children were in basic 4 and above, as at the time of this study had serious complaints about the BSTC being overloaded. Their precise statements and formulated meanings are outlined in table 2.

Table 2: Significant statements of parents on BSTC and formulated meanings for theme 1

| Significant statements | Formulated meanings |
|--|---|
| Basic 4 and above curricula are overloaded; and the homework given to children requires external assistance which affects clarity of terms and concepts. | The content becomes broader at the higher basic classes |
| BST is given two to three periods per week; and there is voluminous content for the children to cover. This compels the teachers to complement the unfinished work at school with assignments. The children hardly have time for other things. | Too voluminous content with inadequate time allocated to BST on the timetable. Teachers give too many assignments to children in BST. |
| Implementation of the BSTC curriculum is not adequate. | BSTC profuse for implementation. |
| I observe cram, pour and forget syndrome in my child. This has reduced ability to apply basic science principles to real life situations. | Teaching is done to cover up the syllabus not for imparting knowledge. |
| BSTC is too voluminous. The amalgamate subjects should be unmerged. | BSTC, an obvious combination of other subjects is too voluminous. |

Theme 2: Consciousness of the Environment and Life Application

There were series of positive statements from interviewed parents on the contributions of BSTC curriculum on their children's awareness of their environment. All the parents appreciated BSTC's role in developing their children's consciousness of the environment and appreciation of nature. Some of the parents identified their children's ability to relate what is taught in school to life application especially in solving basic problems at home; and they appreciate BSTC in fostering this ability. These statements and their formulated meanings are in table 2.

Table 3: Significant statements of parents and formulated meanings for theme 2

| Significant statements | Formulated meanings |
|--|--|
| There is a link between what the children are taught and daily life application. | The children can apply BSTC. |
| My children appreciate natural things and are conscious of their environment. | A product of well-taught BSTC content with respect to children's consciousness of the environment. |
| They are able to apply basic scientific knowledge to real life situations and identify basic science concepts. | The children can relate with basic science principles. |
| My child makes effort to repair spoilt electronic gadgets at home. | The child can apply BSTC. |
| Awareness of the environment and application of computer knowledge to daily life. | The children can apply computer knowledge to real life situation. |
| Awareness of their body parts, the environment and familiar with ICT gadgets. | Children can apply BSTC beyond the classroom. |
| It has helped my children to appreciate the environment. | The children appreciate the environment. |

Theme 3: It is Rich.

In this cluster, parents' indubitable statements and views revealed that the BSTC curriculum is rich. They adjudged BSTC as helping their children's enthusiasm, curiosity and quest for knowledge; the approach to BSTC is holistic, sufficient and it is rich. The significant statements and formulated meaning are presented in table 4 below.

Table 4: Significant statements of parents on BSTC and formulated meanings for theme 3

| Significant Statements | Formulated Meanings |
|---|---------------------------------------|
| I appreciate BSTC so much because my child asks questions a lot about how things happen. | BSTC creates enthusiasm in the child. |
| It fosters enthusiasm and curiosity, it breeds questioning, and there is satisfaction when attended to. | Quest for knowledge identified. |

| | |
|--|--|
| My children trouble me so much, wanting answers to several things. | Demonstration of curiosity by the child. |
| The approach to BSTC is holistic. | The BSTC is robust and sufficient. |
| So many times, I see my child displaying critique ability. | Demonstration of curiosity by the child. |

Theme 4: Perceived Grey Areas of BSTC

This theme presents quotes and views on very specific areas identified by many of the parents as loopholes of the BSTC. Many of the parents' views are that there are: negligible ICT learning outcomes, no inclusion of adequate practical work, discontinuity of learning/reduced trend in learning basic science, fewer experiments and more pictures. The significant statements and formulated meanings are indicated in table 5.

Table 5: Significant statements of parents on BSTC and formulated meanings for theme

| Significant Statements | Formulated Meanings |
|---|--|
| "The BSTC is not reviewed regularly; you can imagine the present one was reviewed in 2012. | BSTC should be reviewed as regularly as possible. |
| There are fewer experiments carried out by the child to illustrate some science principles. | Adequate experiments should be given to children in order to substantiate science principles. |
| Negligible ICT learning outcomes, most of what the children are taught are basically theoretical. | Children are not engaged in sufficient practical exercises in ICT. |
| There are no sufficient textbooks on ICT for children, especially to assist teachers drive home their points. | Well illustrated textbooks are not adequately and readily available for teachers and children's use. |
| "My children are saddled with too much notes and assignments. There not given adequate practical work especially from basic 4 and above". | No inclusion of adequate practical work for the children especially in basic 4 and above. |
| Discontinuity of learning/reduced trend in learning basic science. | Learning of BST is negatively affected due to the structure of basic education running with the first six years in a |

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|---|---|
| | school and the last three years in another school. |
| BST is taught with more pictures and fewer experiments; this is not too good. | Adequate life experiments are not used to teach BST; rather, more pictures are used to teach BST. |

Research question 2: What are parents' expectations from their children in learning basic science technology?

In answering question 2; 24 significant statements were extracted from the 10 transcripts. Tables 6 to 8 include significant statements with their formulated meanings. Arranging the formulated meanings into clusters resulted in 3 themes.

Theme 5: Innovative Teaching Methods

In this theme, parents expressed their great expectations on BSTC. An angle of attention was drawn to the teaching methods in Basic science and ICT with the following statements shown in 8table 3.

Table 6: Significant statements of parents and formulated meanings for theme 5

| Significant statements | Formulated meanings |
|---|--|
| Basic science and ICT teaching should be innovative and allow independent thinking. | Teaching of basic science should evoke new ideas rather than regurgitate old ideas. |
| There should be introduction of peer learning through networking | Teaching should steer further interest among the children. |
| More emphasis and time should be allocated to Basic science and ICT on the school time table. | Since Basic science and ICT are very important and voluminous, more time should be allocated to them. |
| It should be taught richly enough for Basic science and ICT learning even if one does not take up a career in the sciences. | More experiments and practical works should be devolved to the teaching of Basic science and ICT. |
| Teaching should target students' interest to promote a higher number of science students. | New teaching methods should be employed in the teaching of Basic science in order to improve students' |

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|--|---|
| | interest; and consequently produce higher number of science students. |
| The child should be able to distinctly identify scientific terms. | Scientific concepts should be clearly explained and illustrated. |
| Teaching and learning of Basic science and ICT should be continuous within a school such that there will be consistency of teaching styles. | The present structure of basic education running with the first six years in a school and the last three years in another school should be reviewed such that the whole basic education will be under a school. |
| Scientific principle governing every concept should be known. BSTC should be a preparatory platform from which variety of career choices are made. Team- teaching should be encouraged in basic science. | Expertise is required for teaching basic science to produce a balanced output. |

Theme 6: Dynamic Curriculum

Clusters of statements expressed by parents for this theme revealed their expectations on timely review of basic science curriculum. Exact expressions by parents and formulated meanings are stated in table 7.

Table 7: Significant statements of parents and formulated meanings for theme 5

| Significant statements | Formulated meanings |
|---|--|
| Embedding family life and emerging issues in the curriculum. | There are still some content gaps in the curriculum. |
| Addition of emerging issues such as insurgency and pandemic, to create awareness among the children and adjustments to the emerging issues. | Constant review of curriculum to capture imminent national and international issues. |
| It should reflect true life situation. | Curriculum should be lively. |
| Curriculum review should change with time. | The curriculum should be reviewed regularly. |

Theme 7: Pragmatic Teaching Approach

Parents expressed some pragmatic expectations to learning Basic science and ICT; these are expressed in table 8 below.

Table 8: Significant statements of parents and formulated meanings for theme 7

| Significant statements | Formulated meanings |
|---|--|
| There should be Basic science and ICT laboratories in all schools offering basic education. | Functional and well equipped Basic science and ICT laboratories should be in all schools offering basic education. |
| Children should be exposed to more practical work rather than loading them with notes and pictures. | Adequate and appropriate practical work should be given to children. |
| Children should have access to relevant equipment and practical. | In addition to demonstration, children should be involved in relevant and age appropriate practical. |
| Very good Basic science and ICT textbooks should be made available. | There is need for access and availability of well illustrated and adequately simplified textbooks for children in Basic science and ICT. |

DISCUSSION

In this study, parents expressed several views and expectations of the Basic science and ICT curriculum. Their views and expectations are presented in four and three themes respectively. The four themes on the parents' views are: *'too voluminous content'*, *'consciousness of the environment and life application'*, *'it is rich'*, and *'Perceived grey areas of BSTC'*. The three on the parents' expectations are: *innovative teaching methods*, *dynamic curriculum*, and *pragmatic learning approach*. Many of the parents view the Basic science and ICT curriculum as being too voluminous, especially at the upper classes. This they feel has a chain effect because it compels teachers to give huge assignments to children, since the workload cannot be exhausted within the time allocated on the timetable; the children cannot finish the assignments on their own and often times require external assistance from parents, older siblings or home teachers. The

parents complained that their children are saddled with huge notes to write. At the end of the day, learning is seemingly not maximally meaningful rather becomes rote. Parents' recommendations were that the BSTC could be unmerged; more time is allocated to BSTC on the timetable and that teachers with specialization should take children in the composite subjects. For example, teachers with specialization in ICT should be employed to take only ICT and not the whole BST; likewise, teachers with specialization in Basic science should be employed to take only Basic science and not the whole BST. The parents' view of unmerging BSTC is to possibly reduce the workload, this is at variance with reasons that led to the merging of the four constituent subjects to BSTC ab initio. Igbokwe (2015) identified among others two reasons for the merging which are: recommendations of the Presidential Summit on Education (2010) to reduce the number of subjects offered in Primary and Junior Secondary Schools; and, feedback from the implementation of the curricula in schools that identified repetition and duplication of concepts as the major cause of curriculum overload

The second theme '*consciousness of the environment and life application*' entails parents' admiration of BSTC for its role in creating consciousness of the environment, developing nature appreciation and children's ability to apply some of the contents taught to things at home. For instance, a parent appreciates that her child makes effort to repair spoilt electronic gadgets at home, while some parents appreciate their children's awareness of the human body functionality and ability to apply computer knowledge to daily activities

In the third theme '*it is rich*', majority of the parents view the BSTC as being rich in inculcating quest for knowledge, enthusiasm and curiosity in their children. The parents acknowledge the role of BSTC in helping their children express quest on several occasions and are satisfied when attended to. This attribute they believe is highly fundamental to

becoming successful in the academic and career. A parent views BSTC as holistic and sufficient.

The fourth theme '*Perceived grey areas of BSTC*', includes some areas of the BSTC indicated by the parents that need to be looked at. Some of the parents frown at their children having to do the first six years of the basic education in a primary school and thereafter go to a secondary school for the remaining three years. To them, it implies changing of teachers, styles and method of teaching; they observed that this structure negatively affected their children who are currently doing Basic science in the junior secondary schools. Some of the parents posit that junior secondary schools that do not have good basic laboratories will not be able to continue the healthy that was laid for the children in the primary school. The parents pointed out that most times, children are taught Basic science using pictures and they are not exposed to adequate practical to substantiate scientific principles. Similarly, parents observed that there are negligible learning outcomes in ICT because children are not engaged in sufficient practical exercises in ICT, well illustrated textbooks are not adequately and readily available for teachers and children's use. The parents also viewed that the BSTC is not reviewed as regularly as needed.

Some of the parental expectations clustered into the fifth theme '*innovative teaching methods*' are that: teaching of ICT and Basic science should evoke new ideas rather than regurgitate old ideas in children; new teaching methods are employed in the teaching of ICT and Basic science in order to improve students' interest; and consequently produce higher number of science students. The parents expect that more experiments and practical works are devolved to the teaching of Basic science and ICT and BSTC should be a preparatory platform from which variety of career choices are made. In addition they pointed that team-teaching should be encouraged in basic science, while functional and well equipped Basic

science and ICT laboratories should be in all schools offering basic education.

A major expectation of the parent is presented in the sixth theme 'dynamic curriculum'. Here the parents expect that the BSTC be reviewed regularly to address some content gaps such as family life and emerging issues in the nation. The identified emerging issues are: insurgency and pandemic such as laser fever and COVID-19. As there are lots of myths and misconception about the pandemic, any information from the BSTC is considered scientific and reliable. This parental expectation of the BSTC aligns with the observation of Emembolu, Emembolu, Umechukwu and Aderinwale (2020) that despite the inclusion of HIV and AIDS themes in the present curriculum, several other communicable diseases such as Ebola, Lassa fever, viral hepatitis and tuberculosis are yet to be included in the new curriculum. Presently, the nation is bedeviled with insurgency; and since children are major victims, the curriculum should be proactive in giving preventive information that can arm the children against being preys.

Theoretical Elements

Curriculum evaluation sometimes precipitates Curriculum review. Literature indicates several curriculum evaluation models; among them are: Stufflebeam's Context, Input, Process and Product; Scriven's Goal-Free; Stake's Responsive Model; and, Eisner's Connoisseurship Model Levin (2010). Levin (2010) notes that these four models have common opinions on what make curriculum evaluation; these opinions are presented in Applied Strategies for Curriculum Evaluation (ASCD monograph). These common opinions include: study the context, use qualitative methods, assess opportunity cost, and determine client concerns. As noted earlier, parents form part of the curriculum clients. The parental views and expectations presented in this study have reflections of their appreciation and critiques of the BSTC. These

reflections are principal (among the models listed above) in Eisner's Connoisseurship Model. This study therefore suggests that parental views and expectations be considered raw materials in curriculum review.

CONCLUSION

In this study, researchers tried to describe what parents view and expect from Basic science and technology with respect to Basic science and ICT. Generally, the parents appreciate BSTC for playing vital roles of nature appreciation, consciousness of the environment, awareness of the human body functionality and golden spirit of curiosity and quest for knowledge in their children. Their views are also that BSTC is too voluminous and as a composite subject it should be unmerged or more time be allocated to it on the timetable. The parents posit that BSTC within the 9-year basic education structure should be reviewed.

Nevertheless, the parents expect that BSTC should be reviewed regularly to enable children cope with realities of the immediate contemporary happenings such as COVID-19 pandemic, Lassa fever endemic and insurgency. The parents also expect a surer foundation for further studies and career that BSTC is expected to give children. The parents expect that BSTC be equipped with adequate relevant practical activities and modern learning strategies. Parental views and expectations should not be trashed but rather to be underscored as raw materials that are subject to the processing of curriculum experts, this is in agreement with studies that have adjudged parental expectations as having direct effects on children's achievement (Englund et al (2004); Froiland (2013); Ma (2018). Although parents who participated in this study work in higher institutions, but not necessarily involved in curriculum planning and development of curriculum, they may not have a firm grip of professional view of the BSTC. However, whatever their opinions are may not be taken hook line and sinker but may be taken as a cue that will serve as a work

tool for planners and developers during Basic Science and Technology Curriculum review.

Implications for Basic Science and ICT

Basic science and ICT form an indispensable pivot of the core subjects in basic education; and, if our nation is to develop, the need to have a dynamic curriculum in this 21st century is not negotiable. To have a dynamic curriculum, therefore, review has to be more regular than before; that should be premised on research. Since parents are curriculum clients, such research could involve parent-related variables such as parental view and parental expectations.

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