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Communication, Language and Library as Balm of Scientific Development

I.W. Udomisor. PhD.
Department of Mass Communication University of Maiduguri, Borno State, Nigeria.
Emem I. Udomisor
Ramat Library, University of Maiduguri, Borno State, Nigeria.
Philibus Yamta
Department of Mass Communication, University of Maiduguri, Borno State, Nigeria.
Email:iriswilson 2012@yahoo.com

ABSTRACT
This study examines the symbiotic relationship between the humanities specifically Communication, Library and Language and the Sciences, Medicine, Engineering, Chemistry, Biology and Agriculture. It explores the various ways through which communication, library, and language advance the process of scientific learning and practice. As an analytical and descriptive study, the study used data mostly from documentary sources.
Science and humanities such as communication, library and language have always helped each other; the growth of one has largely contributed to the growth of the other. Skills gained from the study of language and communication particularly, speaking, reading, writing, and listening help in the study of science at all levels. Problem solving ability in the sciences depends on the understanding and recognition of the language used. The development of modern science has also affected the development of language, library and communication. Scientific methodology of enquiry such as observation and experimentation also affect the study of language and communication as writers of literature borrowed these method to develop their works. On the other hand, the works of humanities have on several occasions spurred up scientist to work on the ideas put down in their works leading to an aspect of science known today as "Science Fiction". Works of humanists and writers such as H. G. Wells' The First Man To The Moon, George Orwells' 1984 and Aldous Huxley's Brave New World have led to tremendous advancement in science in the areas of space exploration merchandized and automated society and the development of test-tube babies. De-emphasizing the development of the humanity sector in education is at the detriment of science development because to develop the science effectively, there is need to develop the humanity sector effectively.
Keyword: Communication, Language, Library, Balm, Development.

INTRODUCTION

History shows that the world has never witnessed anything better than the current trend of globalization, a situation characterized by international linkages in trade, finance, markets, production, politics, transportation, energy, medicine, education and culture owing to discoveries in microelectronics, information processing, communication and technology (Babangida, 1998). What we witnessed today could be termed as the peak of scientific and technological development which came owing to the discovery and application of scientific methods by great scientists and technologists. Their discoveries and inventions in diverse fields of human endeavour have made it possible for man to accomplish tasks faster, easier, and cheaper than ever. Each time a discourse on scientific development comes up; the memories of certain famous names come back to us afresh. Great minds like Andreas Vesalius, Nicolaus Copernicus, Isaac Newton, Galileo Galilei, Edmond Halley, Robert Hooke, Chritian Hygens, Tycho Brahe, Johannes Kepler, Gottfried Leibniz, Blaise Pascal, Benjamin Franklin among others remain indelible in the annals of this universe for the milestone they recorded in changing human history through their scientific ingenuity (Grant, 1996: 100. Weidhorn, 2005: 155). Their assiduous commitment and that of their successors to work hard has made medicine, transportation, communication, aviation, trade, investment, teaching, learning, sports and every other facet of human existence very enjoyable. These achievements are altogether termed as scientific development.
The great feats attained in the field of sciences may have made scientists to believe that other fields of study are totally irrelevant to societal development today. Many scientists may have gone the extra mile to call for the abolishment of every non scientific discipline. Such group of scientist may be of the view that any non scientific area of specialization should be expunged from the school curricular so that everybody will be mandated to go into the sciences, as according to them, only science can provide solutions to human problems.
Can Science alone solve human problems? This world truly would not have been a better place for us without arts and humanities. If there was no language, the great scientists would not have made their discoveries and inventions known to anyone but themselves. If there was no communication, what strategy could they have used

to pass the information concerning their achievements to us today? If there was no library, where could such information be found by successive generations?

To answer the above question, the main concern of this study as suggested by the title therefore is to locate the roles that language, communication and library play in scientific development.

But before we go into the paper proper, it is expedient for the reader to get the meaning of the world "Balm" which is the relationship that we want to establish between scientific development as a variable on one hand, and the other three words – Language, Communication and Library as a set of variables on the other hand.

Balm has been defined by the Longman Dictionary of Contemporary English simply as an oily liquid with a strong pleasant smell that you rub into your skin, to reduce pain ... Something that gives you comfort. In this paper, balm is a noun used figuratively. But what we are really trying to find out is whether scientists rely on language, communication, and library to succeed in their efforts to find solutions to human problems.

AIMS AND OBJECTIVES

The aim of this study was to find out or examine if studies in the field of humanities, such as communication, language and library can in anyway affect development and growth of science discipline such as Chemistry, Biology, Engineering and Computer Technology either positively or negatively.

It was to find out if there still exist any valid need to continue to maintain humanities curriculum in our school syllabuses.

To find out if emphasizing only science syllabuses in all institution of learning would provide the necessary springboard for needed societal development.

SIGNIFICANCE OF THE STUDY

The study was considered crucial because of the many benefits the society would derived from it. Firstly, it would help educational planners and policy makers to know precisely where to focus attention and give priority to in the development of educational curricular for effective results. It would help governments and other agencies involved in providing education and training to avoid waste of funds and duplicity of efforts in trying to provide necessary logistics for a functional education that would be beneficial to a fast development of the society.

The society would experience a quantum leaps in the drive for scientific, social and economic development. Educational curricular would benefit tremendously as they would be properly streamlined for a functional and result-oriented training. It would contribute to an ongoing or stimulate fresh debate in this vital area of human development.

METHODOLOGY

Documentary survey method was used to carry out the study. As an analytical and prescriptive study, data for analysis were obtained through secondary sources which include books, journals, documents and other relevant materials available to the researchers.

DEFINITION

Science according to Heilbron (2003:vii) is an English term derived from the Latin word "scientia", meaning "knowledge" which is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe. 'Another definition of the word by Aristotle says that "science referred to the body of reliable knowledge which can be logically and rationally explained". Merriam-Webster Online Dictionary (2011) equally refers to science as "knowledge or a system of knowledge or such a system of knowledge concerned with the physical world and its phenomena". In a similar vein, the online encyclopedia, Wikipedia defines science as "a body of empirical, theoretical and practical knowledge about the natural world, produced by scientists who emphasize the observation, explanation, and prediction of real world phenomena. Heilbron (2003) says that "*modern science is a discovery as well as an invention. It was a discovery that nature generally acts regularly enough to be described by laws and even by mathematics which required invention to devise the techniques, abstractions, apparatus, and organization for exhibiting the regularities and securing their law-like descriptions*".

A most recent definition given by the Longman Dictionary of Contemporary English (2009) says that science is simply knowledge about the world, especially based on examining, testing and proving facts. From the above definitions, one can deduce that science is knowledge or a body of knowledge about world's phenomena which can be explained with vivid or concrete evidence.

Science has three main branches, namely:

i. The Natural Sciences made up of Astronomy, Biology, Botany, Chemistry, Ecology, Evolution, Geology, Geometries, Paleontology and Physics.
ii. The Mathematical Sciences comprising Algebra, Calculus, Combinatorics, Geometry, Logic, Probability, Statistics, and Trigonometry.
iii. The Social Sciences which is made up of Anthropology, Economics, Geography, Linguistics, Political Science, Psychology and Sociology (Newton Smith, 1994:30; Benedikt, 2002:10-11; Marcus, 2007:107).

Scientific education in Africa was first introduced by the colonialists. The usefulness of scientific education was already clear in the minds of the colonial masters. Primary and secondary schools established by missionaries and private agencies were provided with infrastructures and facilities. Educational policy, planning and management received serious attention and commitment by colonial educational administrators. As a result the educational process delivered effective and positive results according to the wishes and aspirations of the colonial governments which were:

i. To provide clerical support to the colonial administration.
ii. To keep the colonized subjects obedient to the laws of colonial governments.

The emphasis on educational curricular at that time was placed in arts and humanities at all levels because it was this area of training that would produce necessary manpower for the running of the civil service and other administrative machineries of the colonial governments. With the attainment of independence by developing states, the educational structures and orientation put in place by the colonial governments were still intact. Nothing was changed, so the educational system continues to produce expertise to support clerical and administrative functions to the detriment of technological growth. When the effect of such lopsided educational structure came to limelight, independent governments of developing nations embarked upon the process of streamlining and re-orienting the educational sector to obtain the necessary balance in the production of manpower for both administrative and technical needs of their nations.

THE HUMANISTS AND THE SCIENTISTS

Today, two schools of thoughts seem to be competing for attention. The Humanists and the Scientists. While the scientists believe that science alone can provide dependable answers to problems of the environment based on its scientific accumulation and analysis of facts, the humanists believe that science would not even exist without the arts and humanities from where science extracts the data it needs to work with. A curious and sensitive mind would want to see sense in both arguments. Whichever way the inclination may lead, the big poser before educationists and researchers remains “can one exist without the other?”

Bello et al (1999) says that Science, Language and Humanity have a complementary and symbiotic relationship with one another. Science and humanities have always helped each other and the growth of one had largely depended on or contributed to that of the other. According to Bello et al (1999) language and humanities are of the Arts discipline which includes areas such as, Linguistics, Communication, History, Philosophy, English, Sociology, Anthropology and so on. Science is considered to include areas such as Biology, Chemistry, Physics, Mathematics, and Agricultural Sciences. The other division of Applied Sciences includes Medicine, Engineering and Architecture, “To most people, the methods of generating and utilizing knowledge from these two disciplines are different and unrelated.

IMPORTANCE OF HUMANITIES IN SCIENCE DEVELOPMENT

Stressing the important of humanity in the development of science, Mohammed (1997) says that many people particularly in developing state are forced for one reason or the other to learn science or mathematics through a medium of a second language. The process is particularly difficult in nations where the official language of instruction is often foreign language such as English and French, or national language that is mother tongue of the learner. In this case, if training and education in the area of humanities is de-emphasized or phased out, as the current debate seems to suggest the probable outcome may be that the foundation of science could be destroyed. Training in the humanities, such as English languages, History and Communication provides the necessary springboard for understanding and comprehension of the fundamentals of science disciplines and the library is the repository for this information.

According to Mohammed (1997) many people in Nigeria as may be the case in other developing countries start their learning and their schooling with very little or no knowledge of English. Learning to read, he says is a problem and an educational challenge because of the use of English in learning intersects with other areas of the school curriculum. In any learning environment, particularly at the tertiary levels, learners are referred to texts for examples and practice. Success in working with the texts depends on the reading skills and comprehension of any specialized meanings in the relevant topic, particularly in the science oriented disciplines.

The importance of language and the humanities in the learning of sciences has been emphasized by researchers. (Aikens 1972; Austin and Howson 1979). Aikens 1972 emphasized that linguistics ability affect performance of students in Science and Mathematics. According to him not only is the language spoken in the classroom is important for communication and understanding, but the student's linguistic abilities are also important for science and mathematical thinking, problem solving and the construction of scientific and mathematical meanings. Science and mathematics according to Sharufuddin (1984) is a language that uses carefully defined terms and concise symbolic representations, which add precision to communication. According to Bello *et al* (1999) researchers have carried out so many experimental researchers to establish the relationship if any, that may exist between the disciplines of sciences and humanities. According to them, most of these experiments point to the conclusion that skills gained from the study of language and humanities, particularly speaking, reading, writing and listening helps the development of science at various levels of education.

Champagne and Klopfer (1981) agree that problem solving ability in the sciences depends largely on the understanding or recognition of the pattern of language used and also on the knowledge of the prepositions that enables inferences to be made. In recognition of this, Raven, cited in Bello *et al* (1999) argues 'that researchers in science education should initiate research into written language and its relationship to cognitive development as a means of incorporating what is presently known about the acquisition of concrete and formal reasoning process into the design of the predominantly verbally delivered materials. Lewis (1972) agrees that components of language such as reading, vocabulary and comprehension, mechanics of English, punctuation of spelling show high correlation with science and mathematic reasoning and fundamentals.

LIBRARY AS REPOSITORY OF SCIENTIFIC THOUGHTS

According to Lawal (2003) the invention of the printing technology was important to the proliferation of science knowledge and ideas through books. In the Egyptian, Chinese, and Roman civilizations, books were important repository of scientific thoughts and knowledge. When science and technology made its impact felt greatly in the 21st century, it spurred the need and demand for books. In the areas of science, arts, technology and crafts, books were needed to keep records, facts and information for future references. It can be said here that the growth of the book publishing industries of the world was a direct product of qualitative and quantitative university education system whose foundation was laid through the disciplines of humanities. Scientific facts, data and information were used and presented through books for the various generations of the society. Bello *et al* (1999) agree that the early origins of science have it root in early Egyptians and Babylonians who were able to retain this credit because they had an elaborate language which, aided by their invention of the literacy system of writing, gave permanence and wider audience to their discoveries. According to them, the Indians were also making similar discoveries in the areas of science as the Egyptians. Today the Indian contributions to the development of science disciplines and scientific discoveries are not known or remembered due to the fact that the Indian language was no developed as those of the Egyptians and Babylonians. This tells a curious mind that in their efforts to develop, the Indians emphasized and gave attention only to the science sector and completely ignored the development of the humanities sector, as a result, their contribution to the development of the science sector became meaningless, insignificant and unknown. In the words of Bello *et al* (1999) we are able to know the much we know today about science because there had been language and humanities disciplines to preserve it.

INFLUENCE OF SCIENCE IN LITERATURE

It would be altogether misleading for one to conclude that the science sector has not affected the humanities sector in any way. In this regard, Bello *et al* arguments remain authentic. The development of modern science, they say, has affected the development of the humanities sector. "During the development of modern science, beginning from the 17th Century, the methodology of inquiry such as observation and experimentation affected the study of language, especially in the field of literature. Writers of literature at that time borrowed these methods of observation and experimentation to develop their works. Citing William Shakespeare and William Congrave, they claim that the concept of writing from observation produced a group of writers who are, today, referred to as "the Social Pathologists" because of imitation of science. On experimentation aspect, they say just as science at that period was trying out its hands on many new things and in the process borrowed ideas from humanities, so also did some men of humanities and literature copy from science and started trying out their hands on new forms and techniques of literature".

In the development of ideas, science and humanities, especially literature do have a complementary relationship. If for any reason, one can say here that humanities and literature are disciplines based on imagination because over the decades men of literary works have been able to imagine situations and events which they have put down in fiction. In Bello's argument, it is clear beyond doubt that the products of humanists' imagination have in

several occasions spurred scientists to start working towards such themes or ideas as put down in the work of fiction known as "Science Fiction". For instance, H. G. Wells "The First Man To The Moon", George Orwell's "1984" and Aldous Huxley's "Brave New World" have since their publication, been regarded as the inspiration or driving force leading to scientific discoveries in areas of space and exploration, merchandized or automated society and test-tube babies respectively. There is no doubt from the above analysis that the humanities provide science with the themes for its works. This confirm Antia (2004) claim that science sometimes gets made not in the laboratory of experiment and observation, but also in correspondence.

To underestimate the functions and the roles of humanities in the overall development of man and society is to commit an unpardonable mistake. Voicing this concern Tisher (1999) explains that verbal interaction in science class is very effective means of instruction because among American and Australian Schools, oral discussions in science are guided by the terms described, explain, and designate. Moon, (1971) also agrees that language and literature helps the science teacher in the development and implementation of his science curriculum. According to him, teachers who express teaching methods and materials following the suggestion of science curriculum improvement study differed significantly from those who engaged in conventional science teaching method. According to him, teachers using the conventional method did more talking than directing, and obtain faster responses in cognitive tasks. In line with this, Ogunyemi (1972) agrees that effective learning among children is as a result of their interaction with objects and events. He added that interaction with teachers and interaction among themselves also proves to be very effective in some science related cognitive tasks. The contention of Nwogu (2002) that technical writing is any form of writing, in whatever field on whatever topic that is specialized factual, objective and based on observation, investigation and experimentation, which does not allow figurative and colloquial expressions, but demand simple, clear, precise diction and simple, unambiguous and well-informed does not in any way make science language the master of the communication process. Of course, Bello *et al* (1999) clearly repudiates any attempt to such claim. According to them, language has provided an event for the expression of science while science has similarly increased the vocabulary of language. Teaching of grammar, reading and writing today are redesigned in schools to accommodate scientific views and the needs of science of students. Schools curricular today emphasized the knowledge of the active and passive voice when reporting and discussing science topics. Bello *et al* (1999) also maintained that in the teaching of reading schools today, the skills of intensive reading are thoughts with emphasis on how to read reports, textbooks of science where, in every word or phrase contribute to the understanding of the materials. Balogun (1979) goes further by categorizing English language into how it affects science through grouping them in specific areas such as class, process, equalities, relations and abstractions. These classes of English language posses' words, which are, definitely science oriented. Verbs, he says are also classified according to how they reflect.

LANGUAGE AS BALM OF SCIENTIFIC DEVELOPMENT

Language has been defined by Encyclopedia Americana Vol. 16 as "the principal and richest means of communication used by human beings". Another definition of language given by the Longman Dictionary of Contemporary English (2009) says that language means "system of communication by written or spoken word, which is used by people of a particular country or area".

Language is very essential to any type of human activity development inclusive. This is the opinion of the Australian-British Philosopher, Ludvig Wittgenstein as quoted by Lilscrab (2008:3) when he says that "the limit of language is the limit of knowledge". He added that any form of cooperation and communication would almost, if not totally be impossible without language.

Against this background, any development planner who neglects language in his planning process has planned to fail. This is the view of Prah (1993) when he says, "in search for solutions to the development problems of Africa, students of African development have often ignored linguistic and other socio-cultural sources.

Bodomo(1996) says that language is the only vehicle that can be used for sharing of ideas, skills and knowledge in any society. To him without language, there can be no development, because if development is seen as a sustainable, socio-cultural, economic and technological transformation of a society, then language becomes an important variable in the development process.

Bodomo (1996) still argues that language is the only vehicle that can transport any idea however good it is to the rightful destination. He adds that it is in this sense that we notice that the most intelligible and intelligent reactions by speakers to new ideas and technologies are registered through their language.

Wa Thiongo (2006:57) is of the opinion that language is between the realms that make up a community: wealth, power, values and the self-definition and evaluation.

This conveyed the fact that development will only be an exercise in futility unless there is language through which what has been discovered or invented can be made known to the world. This fact remains sacred because, the word science which is "Scientia".in Latin is a language. It was through the used of language that all the great

scientists were able to pass the knowledge of their exploits to other generations which came after them. This therefore means that without language, science or scientific development can never be.

COMMUNICATION AS BALM OF SCIENTIFIC DEVELOPMENT

Communication as defined by Udall and Udall (1979:5) refers to a process by which a person or a group shares and impart information to another person or group so that both would clearly understand one another". Similarly, Eyre (1983:1) says that communication is not just giving information, it is the giving of understandable information and receiving and understanding the message. According to him, communication is the transferring of a message from one party to another so that it can be understood and acted upon. Chappell and Read (1990) also define communication as any means by which a thought can be transferred from one person to another; while Hoffinann (2007:67) opines that communication is a transaction involving the meaningful exchange of information between a sender and a receiver which entails a process by which messages are encoded, transmitted and decoded.

Communication is very instrumental to development just the same way as language is. This is why Philibus (2006) refers to it as "Weapon of Mass Development". It has been widely accepted by 'Development Scholars' that information is the wheel of every development process, messages, ideas, skills, strategies or whatever is needed for development to take place must be conveyed through a medium. Underscoring the value of communication in development, Wilbur Schramm in Taylor (1997:42) states that "without adequate and effective communication, economic and social development will inevitably be retarded, and may be counter-productive. With adequate and effective communication, the pathways to change can be easier and shorter.

Severin and Tankard (1988:165) also say that "modern society is nearly unimaginable without the mass media: newspaper, magazines, paperbacks, radio, television and film. Therefore anyone who has a skill, idea, knowledge or information to pass to another must undergo a process or must use a medium and that process or medium is what is referred to as communication.

Available data have shown that all scientific discoveries and inventions that came from man's ingenuity could have not been passed from one generation to the other if not through communication and information storage and retrieval.

LIBRARY AS BALM OF SCIENTIFIC DEVELOPMENT

Encyclopedia Americana Vol. 17 (2001) says that library connotes a body of recorded information brought together for a specific purpose, organized for use, and made available to users. The Longman Dictionary of Contemporary English (2009) also refers to library as a room or building containing books that can be looked at or borrowed.

A national or state library serves as a national repository of information, and has the right of legal deposit, which is a legal requirement that publishers in the country need to deposits a copy of each publication with the library. Unlike a public library, they rarely allowed citizens to borrow books. Often, they include numerous rare, valuable or significant works. There are wider definitions of a national library, putting less emphasis to the repository character. Many national libraries operate within the National Libraries Section of the International Federation of Library Associations and Institutions (IFLA) to discuss their common tasks, define and promote common standards and carry out projects helping them to fulfill their duties. National libraries of Europe participate in the European Library. This is a service of the conference of European National Librarians (CENL). The first national libraries had their origins in the royal collections of the sovereign or some other supreme body of the state (Line and Line, 1979:3 17-8).

A research library contains an in-depth collection of materials on one or more subjects. A research library supports scholarly or scientific research and will generally include primary as well as secondary sources; it will maintained permanent collections and attempt to provide access to all necessary materials. A research library is most often an academic or national library but a large special library may have a research library within its special field and a very few of the largest public libraries also serve as research library; and in Europe such libraries may belong to the Association of Research Libraries of the United Kingdom or they may be Members of the Research Libraries of United Kingdom (Young, 1983:188).

A reference library does not lend books and other items; instead, books are read at the library itself. Typically, such libraries are used for research purposes, for example at a University. Some items at reference libraries may be historical and even unique. Example of reference libraries includes the British Library in London and the Bodleian Library at Oxford University. Many libraries contain a "reference section", which holds books, such as dictionaries, which are common reference books, and are therefore not lent out. Such reference sections may be referred to as "reading rooms", which may also include newspapers and periodicals. (Champneys, 2007:93).

A public library provides services to the general public and usually makes at least some of its books available for

borrowing. Typically, libraries issue library cards to community members wishing to borrowed books. Many public libraries also serve as community organizations that provide free services and events to the public, such as reading groups and toddler story time.

An academic library is generally located on the campuses of colleges, and universities and serves primarily the students and faculty of that and other academic institutions. Some academic libraries, especially those at public institutions, are accessible to members of the general public in whole or in part.

Academic libraries are libraries that are hosted in post-secondary educational institutions, such as colleges and Universities. The main functions of an academic library are to provide resources and research support for students and faculty of the educational institution. Specific course-related resources are usually provided by the library, such as copies of textbooks and article readings held on 'reserve' meaning that they are loaned out on a short-term basis, usually a matter of hours.

Academic libraries offer workshops and courses outside of formal, graded course work, which are meant to provide students with the tools necessary to succeed in their programmes. These workshops may include help with citations, effective search techniques, journal data bases, and electronic citation software. These workshops provides students with skills that can help them achieve success in their academic careers (and often, in their future occupations), which they may not learned inside the classroom.

The academic library provides a quiet study space for students on campus; it may also provide group study space, such as meeting rooms. In North America, Europe, and other parts of the world, academic libraries are becoming increasingly digitally oriented. The library provides a gateway for students and researchers to access various resources, both print/physical and digital. Academic institutions are subscribing to electronic journals databases, providing research and scholarly writing software, and usually provide computer workstations or computer labs for students to access journals, library search databases and portals, institutional electronic resources, internet access, and course- or task related software (i.e. word processing and spreadsheet software). They are increasingly acting as an electronic repository for institutional scholarly research and academic knowledge, such as the collection of digital copies of students' theses and dissertations (https://tspace.library.utoronto.ca/).

Children's libraries are special collections of books intended for juvenile readers and usually kept in separate rooms of general public libraries. They are an educational agency seeking to acquaint the young with the world's literature and to cultivate a love for reading. Their work supplements that of the public schools.

Services commonly provided by public libraries may include storytelling sessions for infants, toddlers, preschool children, or after-school programs, all with an intention of developing early literacy skills and a love of books. One of the most popular programs offered in public libraries are summer reading programs for children, families, and adults (Encyclopedia Americana).

All other libraries fall into the "special library" category. Many private businesses and public organizations, including hospitals, museums, research laboratories, law firms, and many government departments and agencies, maintain their own libraries for the use of their employees in doing specialized research related to their work. Special libraries may or may not be accessible to some identified part of the general public. Branches of large or research libraries dealing with particular subjects are also usually called "special libraries": they are generally associated with one or more academic departments. Special libraries are distinguished from special collections, which are branches or parts of a library intended for rare books, manuscripts, and other special materials.

Libraries are managed by librarians, record managers, archivists, media and information specialists (Encyclopedia Americana). The library as explicitly described above is the custodian of all materials that contain information about everything under the sun.This simply means that, a scientist who has discovered or invented something must write some record through which someone who comes after him will get to know about what he discovered or invented. If such information is documented, it needs to be preserved and given to anyone who may wish to go through them at any given time. In doing this onerous task the library is a key player in scientific development.

As gateways to knowledge and culture, libraries play a fundamental role in society. The resources and services they offer create opportunities for learning, support literacy and education, and help shape the new ideas and perspectives that are central to a creative innovative society. Libraries also help to ensure that an authentic record of knowledge created and accumulated by past generations are duly preserved without which, it would be difficult to advance research and human knowledge or preserve the world's cumulative knowledge heritage for future generations (White, 2012:1)".

White (2012) also says that libraries are synonymous with education and offer countless learning opportunities that can fuel scientific, economic, social and cultural development.

However, white (2012) observes that today "born digital", such as websites or electronic journals, are unavailable in print format. Without the legal means to preserve and replace works in a variety of media and formats including the format of lifting and migrating electronic content from obsolete storage formats many of

these works would inevitably lost to future generations and historians.

Today it is the opinion of scholars and researchers that libraries also are meeting the criticism of those who would argue that technology has made them obsolete. Moving into the local information hubs for many of our communities, the library is a place to stay connected with the ever-increasing amounts of data, both digital and analog in nature. Computer training, eBooks, databases are managing to preserve the kernel of knowledge. In the ever-increasing flood of data, libraries remain essential to our community and contribute in helping science to succeed in its efforts to develop our society.

FINDINGS AND CONCLUSION

Based on the available data analyzed, it is seen that the discipline of humanities are not only necessary for the development of a society and the human personality but it is crucial, and fundamental pillar that supports effective development of the Science disciplines for effective results and benefits to the society.

Training in the humanities such as English Language, History, Communication and the library as a repository of information provide the necessary springboard for effective and full understanding and comprehension of the fundamentals of Science Disciplines. It is clear beyond any doubt that in any learning environment, particularly at the Tertiary levels learners are referred to texts for example and practice.

Success in working with the text depends on the reading skills and comprehension of any specialized meanings in the relevant topic, particularly in Science oriented disciplines.

It is agreed that components of Language such as reading, vocabulary and comprehension, mechanics of English such as punctuation and spellings show a high correlation with science and mathematic reasoning and fundamentals. All these prove the facts that the disciplines of science cannot work effectively without the support of the humanities sector.

The library is an inevitable organ of Scientific development and knowledge would not have been preserved for future references. it was because the discovery and used of the library in the 19th Century provided effective canopy for information preservation that prompted the book publishing business to strive which encouraged more scientific studies and discoveries.

The study has also revealed that the disciplines of science also affect the disciplines of humanities in some ways. In the 17th Century, writers of literature borrowed the scientific method of observation and experimentation to develop their works. The concept of writing from observation in the 17th Century produced a group of writers who were known as "Social Pathologists" because of their imitation of science.

To underestimate the functions of communication, library and language in effective science development is to retard the wheels of scientific development. Since both disciplines are working hand in hand to bring about the needed development, it would be detrimental to societal development and progress if one is de-emphasized at the expense of the other.

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