Primary Science Curriculum Terminal Competencies in Bangladesh: National and Global polices

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Abstract

Science is needs to sound knowledge; attitudes and skills from the early childhood for create a perfect society. To face the challenges of present primary science curriculum is needed to consider national policies in education. Among twenty nine competencies at primary level in Bangladesh, 15 competencies are related to primary science curriculum. This research targets to find out primary science curriculum terminal competencies in Bangladesh which are focused on global and national policies. This study followed a mixed method research design to provide a better understanding of a research problem than either qualitative or quantitative method by itself. An observation schedule and an interview schedule were used to collect necessary information for this study to address the research questions, a variety of data analysis technique were used. Then document analysis was done. Document of global and national policies and related articles were selected purposively. Respondents to questionnaire were also selected purposively. In Findings, the study reveal that global and national policies in education are enough focused in written terminal competencies chart but these are not sufficiently included in curriculum which is the hindrance to meet with national challenge in 21st century.

Keywords: *curriculum, policies, terminal competencies, scientific literacy, integrated science process skills.*

1. Introduction

In a global economy, most countries aim at raising their international competitiveness by offering knowledge-intense products and services, and new manpower profiles [18]. They expand education and its contents and processes on skills, competences by considering global policies [2]. National policy is dependent on how we understand each of the constituent elements- the 'national' 'education' and 'policy', and the relationships between them. The national policies in education somewhat different, through related, ways; as a 'condition of the Country', 'discourse', 'project', 'scale', and 'means of identifying the reach of particular actors'. As a discourse in education policies the country is invoked as a particular imaginary, often tied to ideas like a 'global knowledge economy', 'global village', 'global social justice' and so on [14]. National education policies are common set of jargon applied in many parts of the country, in locations that are incredibly diverse both culturally and in terms of economic development [17]. Previously education policies set up on national setting but now policies are the result of a 'combination of political forces, social structures, cultural traditions, and economic processes entangled in a matrix of intersecting multi-level, multi-scalar (local, national, regional, and global) sites and spaces'[19]. Actually to overcome the present national problems and to meet the challenges of 21st century, most of the countries of the world are considering global policies to prepare curriculum [15]. Like other Countries [3], Bangladesh also considers global policies to prepare its curriculum. Primary Science curriculum plays a vital role to prepare students for facing and overcoming the future challenges and devour problems [1]. It is Primary science that enables us to look beyond facts to values, it is that encourages us to aspire to knowledge and ultimately to wisdom. Primary Sciences are the study of political, economic, cultural, and environmental aspects of societies in the past, present and future [14]. It should have designed according to emphasis on Electrification, Communication and internet based sustainable development, decentralized approaches to learning. Primary Science in the early childhood/primary years is the essential foundation for students to become active, responsible citizens in a society. As a result, primary level students need a complete, effective and proper Primary Science Curriculum [16]. During five years primary schooling, each student has to acquire twenty nine competencies that are called terminal competencies which are acquired in systematic way [9]. In primary education, students acquire seven terminal competencies which are related with primary science [10]. Are these competencies focused by national policies in education or not, and it is very important question to cope with national demand and met with national challenges [21]. For this reason,

researcher got interested to find out the condition of primary science curriculum terminal competencies focused by national policies.

2. Research Question

1. Are Bangladesh primary level science curriculum terminal competencies focused by Global and national policies in education?
2. What is the condition of Bangladesh primary level science curriculum to cover Global and national policies in education?

3. Methodology of the Study

The research work was qualitative and quantitative in nature. Two types of data collection tools were used in the study- Document Analysis and a Questionnaire. Document analysis was used to find out the condition of primary science curriculum terminal competencies focused on Global and national policies. Purposive sampling technique was used to select global and national policies. Document sampling was included with present primary science curriculum terminal competencies chart. From selected global and national policies, those article was included which are related with primary science. A five scale type Likert scale questionnaire was also used to know the condition of primary science curriculum coping with national policies, needs and issues. 14 questions were included in this questionnaire. To collect opinion of respondents, purposively forty respondents were selected who were the teacher of science in government primary school, Dhaka and Gazipur district, Bangladesh. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave and analyze causes.

4. Scientific literacy for all students

Scientific literacy involves understanding not only science knowledge, but also understanding the nature of science. Students develop an understanding of the nature of science as a key element for achieving scientific literacy. Scientific literacy includes specific types of abilities. Defined some of the attributes of scientifically literate students which they saw as informing the type of learning that might be expected from the compulsory years of schooling. They suggested that a scientifically literate pupil should be interested in and understand the world about them and able to engage in discussion of about science. Such pupils would be able to identify and investigate questions and draw evidence-based conclusions and also be skeptical and questioning of the claims made by others. Finally, scientifically literate pupils are those who make informed decisions about the environment and their own health and wellbeing. Therefore, scientific literacy implies that a person can identify scientific issues underlying global and local situations and influences and express positions that are scientifically and technologically informed. Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all.

5. Global and National Education Policy:

5.1Education:

To stimulate the intellectual and practical qualities of the learners so that moral, human, cultural, scientific and social values are established at personal national and global levels. Just after the assumption of power the present government formed a commission to direct our education policy towards an effective, scientific and modern one keeping pace with the Quadrat-e-Khuda Education commission which was formed in 1972-1974. The policy suggested provisions of free-enrolment, free distribution of education materials, midday school meal and stipend under special arrangement for brining street children to schools and continuation of their studies. The committee suggested extension of primary education up to class eight. The primary education will be free, universal and compulsory and the mandatory inclusion of six compulsory subjects under all streams of education namely general. All the students must study their own religion and receive moral education. Emphasis on science education in education policy 2010.

5.2 The aims and objectives of science education are:

• To prepare the learners in a way that helps them develop their talent, practice of knowledge and creativity equal to an international standard;

• To provide science education to the learners in a way so that the learners understand that there exists a close relationship between technology and humanities and each of them is complementary to the other; Science will be taught as a coordinated discipline.

5.3 Strategies for Primary education

(1). Science education will be introduced at the initial stage. Learners will not be loaded with information but they will learn science with the proper introduction to nature, environment and facts around them. From the very beginning, they will be trained up to develop a scientific mindset.
(2). In addition to classroom teaching, there must be some facilities to show them pictures, videos and to use their observation skills. There will be scope for some experiments that can be carried out with easily accessible materials.
(3). Teachers will always encourage the learners' curiosity and their quality to think independently. Teachers will also help them to use facts and information from practical life rather than asking them to memorize a lot of information.
(4). There will be an integrated science course that includes its different branches for the students of Classes VI to VIII at the primary level. Textbooks must be attractive, easily comprehensible and full of illustration. The learners will receive education on health care.

5.4 The Perth Declaration: UNESCO, Section for Science, Technical and Vocational Education UNESCO 2008, The Perth Declaration calls for revisions of the curriculum for school science and technology that will increase interest in, and recognition of the roles of science and technology in society. This call relates to the teaching at all levels of schooling, including the primary or elementary years. Indeed, the Perth Forum stressed the importance of science and technology having a strong presence in the educational experience of these young learners. The fact that in some countries many students still only attend school in these years makes better science and technology education an urgent goal to achieve. It is, however, only realistic to recognize that most countries have had, and continue to have, factors and conditions at these primary levels that make the teaching of science and technology particularly difficult. Accordingly, these years represent a level of schooling to which policy makers should give special attention in relation to their revision of the curriculum for science and technology education. Some of the difficulties and major issues are now outlined. The production of specific resources for the teaching of science in the primary (elementary) school years has been part of the overall science education scene since the late 1960s. They swung between encouraging young children to have first hand open inquiry encounters with natural phenomena and quite formal introductions to the so called process skills of science. Many primary teachers, with their limited backgrounds in science, found the openness of the former materials too threatening, and the latter, divorced as they were from science content, were easier to teach especially in social science contexts for which they also had meaning. In the mid-1980s, materials were available for teaching science through practical examples of technology and these were welcomed by some teachers because they engaged the children with hands-on activities that made sense to them compared with the more abstract contexts of science. Until the 1990s, however, science was usually part of the formal primary curriculum, but in practice it was very spasmodic, depending on the enthusiasm of individual schools and teachers. The experience with primary science education in the twenty five years since the 1960s provides a long record of high hopes, but unsuccessful attempts, to give science a more persistent and assured positive presence in the education of 37 these young learners. Every variety of support for primary science has been tried in one country or another, and often more than once - new types of quality resource materials, packaged kits of equipment, professional development programs, science specialist teachers, a stronger emphasis in pre-service education, recognition in international testing, etc. This record is a testimony to the special difficulties facing science and technology education in the primary years, and should not be overlooked in the framing of the new approaches that are called for in the Perth Declaration.

5.5 Universal Declaration of Human Rights (1948)

In the general assembly of United Nations article 217(111) on 10th December in 1948, a universal declaration of human rights has been declared to establish and protect the human rights. Some articles related with this research are given bellow-

Article-1 all human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. Article-13 (1) Everyone has the right to freedom of movement and residence within the borders of each state.Article-13 (2) Everyone has the right to leave any country, including his own, and to return to his country. Article-18) Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance. Article-22 Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality. Article-25 Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other

lack of livelihood in circumstances beyond his control. Article-26 (1) everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit. Article-26 (2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace. Article-26 (3) Parents have a prior right to choose the kind of education that shall be given to their children.

5.6. International Convention on the Rights of the Child (1989)

20 November, 1989 the international convention on the rights of the child was transmitted in the general meeting of united nation. Some articles of this convention related with this research are given bellow-

Article-8 States Parties undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference. Article-24 States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. Article-6 (Survival and development): Children have the right to live. Governments should ensure that children survive and develop healthily. Article-17 (Access to information; mass media): Children have the right to get information that is important to their health and well-being. Governments should encourage mass media–radio, television, newspapers and Internet content sources – to provide information that children can understand and to not promote materials that could harm children. Mass media should particularly be encouraged to supply information in languages that minority and indigenous children can understand. Children should also have access to children's book States Parties shall Strive to ensure that no child is deprived of his or her right of access to such health care services. Article-28(1) States Parties shall take all appropriate measures to ensure that school discipline is administered in a manner consistent with the child's human dignity and in conformity with the present Convention. Article-28 (2) States Parties shall promote and encourage international co-operation in matters relating to education, in particular with a view to contributing to the elimination of ignorance and illiteracy throughout the world and facilitating access to scientific and technical knowledge and modern teaching methods. In this regard, particular account shall be taken of the needs of developing countries. Article-29) States Parties agree that the education of the child shall be directed to: (a) The development of the child's personality, talents and mental and physical abilities to their fullest potential; (b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the United Nations; (c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living; the country from which he or she may originate, and for civilizations different from his or her own; (d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin; (e) The development of respect for the natural environment.

5.7. International Commission on Education (1971-1972)

Identifying the global educational crisis the UNESCO had given the duty of a research work entitled "The World Educational Crisis: A System Analysis" to Philip H. Coombs in 1968. Three years later, "The International Commission on Education" was formed in 1971, he added by the education minister of France Edgar Faure. This commission formulated a report entitled "Learning to be". Four fundamental assumptions underlie with this work;

1. International community exists and is reflected in common aspirations, problems, trends, and movement toward one destiny 2.Belied in democracy 3.The aim of development is the complete fulfillment of people

4. A comprehensive lifelong education can produce the kind of complete Person the need for whom is increasing in today's society.

5.8. International Commission on Education for the Twenty-First Century:

UNESCO formed a ''International Commission on Education for the Twenty-First Century", headed by Jacques Delors. This commission is known as Delors' Commission. This commission published a report titled "Learning: The Treasure Within" in 1996. This report reflects on education in the 21st century in the global context. This International Commission identified some fields of education according to needs of 21st century such as Education and Development, Education and Science, Education and Citizenship, Education and Culture, Education and Social Cohesion, Education and work. This commission also indentified the tension that would have been created in 21st

century. This tensions are the tension between the global and the local, the tension between the universal and the individual, the tension between tradition and modernity, the tension between long-term and short-term considerations, the tension between, on the one hand, the need for competition, and on the other, the concern for equality of opportunity, the tension between the spiritual and the material and the tension between the extraordinary expansion of knowledge and human beings' capacity to assimilate it.

5.9 World Declaration on Education for All (1990):

''World Declaration on Education for All'' held in 5-9 March 1990, Jomtien in Thailand, focuses on the basic needs of universal primary education and eliminate adult illiteracy. "World Declaration on Education for All" of the Jomtien Conference put priorities on the Universal Primary Education for All. Some articles of this conference related this research are – Article-I (1) Every person - child, youth and adult - shall be able to benefit from educational opportunities designed to meet their basic learning needs. These needs comprise both essential learning tools and the basic learning content required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time. Article I (2) The satisfaction of these needs empowers individuals in any society and confers upon them a responsibility to respect and build upon their collective cultural, linguistic and spiritual heritage, to promote the education of others, to further the cause of social justice, to achieve environmental protection, to be tolerant towards social, political and religious systems which differ from their own, ensuring that commonly accepted humanistic values and human rights are upheld, and to work for international peace and solidarity in an interdependent world. Article 6) Learning does not take place in isolation. Societies, therefore, must ensure that all learners receive the nutrition, health care, and general physical and emotional support they need in order to participate actively in and benefit from their education. Knowledge and skills that will enhance the learning environment of children should be integrated into community learning program for adults. The education of children and their parents or other caretakers is mutually supportive and this interaction should be used to create, for all, a learning environment of vibrancy and warmth. Dakar education conference was held in Dakar, in the capital of Senegal in 26-28 April, 2000. In this conference

5.10 Dakar Framework for Action (DFA) (2000):

A text was adopted entitled "Education for All: Meeting Our Collective Commitment". In the conference six objectives were defined for the world community from which some are related with this research such as-Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs; Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality; Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy, daily science and essential life skills.

5.11 The Delhi Declaration (1993)

In 1993 the leaders of nine high-population developing nations (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan) of the world adopted the Delhi Declaration and Framework for Action; hereby repeat their commitment to pursue with utmost zeal and determination the goals set in 1990 by the World Conference on Education For All. This declaration (1993) recognized, the content and methods of education must be developed to serve the basic learning needs of individuals and societies, to empower them to address their most pressing problems- combating poverty, raising productivity, improving living condition and protecting the environment and to enable them to play their rightful role in building democratic societies and enriching cultural heritage.

5.12 World Summit for Social Development (1995):

The first world social development Summit was held in March 6-12, 1995 in Copenhagen, among the members of 184 countries. In this conference a declaration was finalized to eradicate poverty from the world. The declarations were about health care, sanitation and food security, raising government development aid and decreasing the loan of poor countries, agreeing among the rich countries for sanctioning of 7% on their total GNP, creating free market and accelerate the economic growth and social development by developing legal framework, foundation of gender equality in women rights, democracy, role of law and inspiring tolerance to immigrants and refugees, developing the international and national cooperation by strengthening the United Nations and other organizations and struggle

against illiteracy, Specially enforcing for the women and the girls and development of education for the indigenous people.

5.13 Millennium Development Goals (MDGs):

In September 2000, meeting at the United Nations Millennium Summit, the world's leaders agreed to a remarkable document, the Millennium Declaration. It committed the global community to a hard and specific agenda for human development. The Declaration demanded that the world set its sights higher and aim for eight specific goals from which related goals of this research are- 3) Promote gender equality and empower women 5) improve maternal health 6) combat HIV/AIDS, malaria and other diseases 7) ensure environmental sustainability and 8) develop a global partnership for development.

6. Science Curriculum Related Terminal Competencies

In our country, 29 terminal competencies are declared for the primary education, that have been acquired a student after completing his/her primary level education. From these terminal competencies 15 competencies are directly related to Primary Science Curriculum.

(1). to repose / place trust and faith on Almighty Allah Ta'ala / Creator and be inspired to love all the created objects.
(4). to be willing to develop imagination, curiosity and creativity.
(6). to gain knowledge of science through acquiring knowledge of natural laws.
(7). to form habit of solving problems and earn science-mindedness through the use of science principle methods and logical thinking.
(8). to acquire the basic skills of Bangla language and to use these skills efficiently in all walks of life.
(12). to be able to solve mathematical problems through logical thinking.
(14). to feel encouraged in independent and free thinking, and practice democratic principles and procedure.
(15). to distinguish between right and wrong through acquiring moral and social qualities and use these in practical life.
(16). to be careful in the use and conservation of personal, family, social and state properties.
(18). to earn an attitude of sense of sacrifice through according preference to others, to demonstrate tolerance and acquire human qualities.
(20). to know adversities and disasters and be skilled in and self confident to face these.
(22). to know about and love nature, environment and universe; to be inspired to improve and conserve environment.
(23). to play a positive role in tackling / facing the problems of changes in climate and weather.
(24). to know about the impact of population on the basic needs of people and environment; also know the importance of human resources
(26). to build the habit of safe and healthful living.

On the other hand, scientific literacy is defined as the capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and make decisions about the natural world (PISA, 2006). According to Goodrum (2004), the attributes of scientifically literate people are given below:

- Scientifically literate people are interested in and understand the world about them
- Scientifically literate people are able to engage in discussion of and about science matters
- Scientifically literate people are skeptical and questioning of claims made by others
- Scientifically literate people can identify and investigate questions and draw evidence based conclusion
- Scientifically literate people can make informed decision about the environment and their health and wellbeing

7. Analysis of Questionnaire

Among the respondents, 40% respondents are agreed with this statement while 25% are strongly agreed, 22.5% are disagreeing and 12.5 % are undecided. Nobody gave their opinion with strongly disagree. According to most of the respondents opinion, received primary science subject training.

Table 1: Primary Science subject trained Teacher available

Scale	Frequencies	Percentage
Strongly Disagree	0	0%
Disagree	9	22.5%
Undecided	5	12.5%
Agree	16	40%

Strongly Agree	10	25%
Total	40	100%

Among all respondents, 50% and 20% are respectively agreed and undecided with this statement while 15% and 12% are respectively disagreed and strongly agreed. There was 2.5% are strongly disagreed with this statement. By considering respondents opinion, it is understand that most of respondents think, Bangladesh Enough learning material use in Primary Science class.

Table2: Enough learning material use in Primary Science class

Scale	Frequencies	percentage
Strongly Disagree	1	2.5%
Disagree	6	15%
Undecided	8	20%
Agree	20	50%
Strongly Agree	5	12.5%
Total	40	100%

72.5% and15% respondents are respectively strongly disagreed and agreed from all respondents to this statement while 10% and 2.5% are respectively disagreed and undecided. Nobody gave their opinion with strongly agreed. So it is obvious that Multimedia use not significantly in Primary Science class.

Table 3: Multimedia use in Primary Science class

Scale	Frequencies	percentage
Strongly Disagree	29	72.5%
Disagree	4	10%
Undecided	1	2.5%
Agree	6	15%
Strongly Agree	0	0%
Total	40	100%

Among all respondents, 40% and 30% respondents respectively agree and disagree with this statement while 22.5% are undecided. 5% and 2.5% are respectively strongly disagreed and strongly agreed with this statement. Most of the respondents think that Class time duration is enough in Primary Science.

Table4: Class time duration is enough in Primary Science

Scale	Frequencies	percentage
Strongly Disagree	2	5%
Disagree	12	30%
Undecided	9	22.5%
Agree	16	40%
Strongly Agree	1	2.5%
Total	40	100%

42.5% and 25% respondents are consecutively disagreed and agreed with this statement while 20% and 12.5% respondents are respectively undecided and strongly disagreed with this matter. Nobody give opinion with strongly agreed. Most of respondents believe that Primary Science Text book not provide sufficient information for student

Table 5: Primary Science Text book provide sufficient information for student

Scale	Frequencies	percentage
Strongly Disagree	5	12.5%
Disagree	17	42.5%
Undecided	8	20%
Agree	10	25%
Strongly Agree	0	0%
Total	40	100%

15% and 55% respondents are consecutively disagreed and agreed with this statement while 12.5% and nobody are respectively undecided and strongly disagreed with this matter. 17.5% give opinion with strongly agreed. Most of respondents opinion Students going outside for collecting data/observe the nature in science class

Table6: Students going outside for collecting data/observe the nature in science class.

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	6	15%
Undecided	5	12.5%
Agree	22	55%
Strongly Agree	7	17.5%
Total	40	100%

Among all respondents, only 5% and 32.5% are consecutively strongly disagreed and disagreed while 12% are undecided with this statement. 47.5% respondents are agreed with this statement and 2.5% are strongly agreed. Most of respondents believe that Teacher-students ratio is enough in Primary Science class

Table7 Teacher-students ratio is enough in Primary Science class.

Scale	Frequencies	percentage
Strongly Disagree	2	5%
Disagree	13	32.5%
Undecided	5	12.5%
Agree	19	47.5%
Strongly Agree	1	2.5%
Total	40	100%

Nobody are consecutively strongly disagreed and strongly agreed with this statement while 30% and 32.5% are respectively disagreed and agreed with this matter. 37.5% respondents are undecided. Most of respondent's opinion undecided about Primary Science Curriculum promotes the student's social and scientific cultural values

Table 8: Primary Science Curriculum promotes the student's social and scientific cultural values

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	12	30%
Undecided	15	37.5%
Agree	13	32.50%
Strongly Agree	0	0%
Total	40	100%

Among all respondents, only 2% and 5% are consecutively strongly disagreed and strongly agreed while 22.5% are undecided with this statement. 42.5% respondents are agreed with this statement and 25% are disagreed. Most of respondents believe that Primary Science Curriculum is enough emphasize to make the student scientific mentality

Table9: Primary Science Curriculum is enough emphasize to make the student scientific mentality.

Scale	Frequencies	percentage
Strongly Disagree	2	5%
Disagree	10	25%
Undecided	9	22.5%
Agree	17	42.5%
Strongly Agree	2	5%
Total	40	100%

Nobody are consecutively Strongly disagreed and Strongly agreed with this statement while 22.5% and 17.5% are respectively disagreed and undecided with this matter. 60% give opinion with agreed. Most of respondents opinion Global policies are focused in primary science curriculum

Table 10: National policies are focused in primary science curriculum

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	9	22.5%
Undecided	7	17.5%
Agree	24	60%
Strongly Agree	0	0%

Total	40	100%

According to all respondents' opinion, 22.5% and 55% respondents are respectively strongly agree and agree with this statement while 10% and12.5% respondents are consecutively disagree and undecided with this. No one is strongly disagreed with this statement. Primary science curriculums focus enough to biological position and features of Bangladesh, making students healthy and wealthy

Table 11: Primary science curriculum focus Biological position and features of Bangladesh, making students healthy and wealthy

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	4	10%
Undecided	5	12.5%
Agree	22	55%
Strongly Agree	9	22.5%
Total	40	100%

From all respondents, 55% respondents are agreed with this statement while 35% and2.5% respondents are consecutively strongly agreed and disagreed. 7.5% are undecided with this statement. No one is strongly disagreed with this statement. Most of the respondents believe that Primary science curriculum focus on development and preservation of the environment and how to use various information for environment safety.

Table 12: Primary science curriculum focus on development and preservation of the environment and how to use various information for environment safety

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	1	2.5%
Undecided	3	7.5%
Agree	22	55%
Strongly Agree	14	35
Total	40	100%

Among all respondents, 40% respondents are strongly agreed with this statement while 44% are agree and 16% are undecided about this statement. There are no one who disagree or strongly disagree with this statement. From all the respondents, most of them believe that Primary social science curriculum giving enough emphasize on health rules with a view to ensuring healthful living.

Table 13: Primary science curriculum emphasize on health rules with a view to ensuring healthful Food

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	1	2.5%
Undecided	3	7.5%
Agree	22	55%
Strongly Agree	14	35
Total	40	100%

From all respondents, 32% and 56% respondents are respectively strongly disagreed and disagreed with this statement while 8% are undecided with this. There are 4% respondents who are agreed with this and no one is strongly agreed with this statement. Most of the respondents opine that Primary Science Curriculum don't fulfill the present requirements of daily needs

Table 14 Primary Science Curriculum fulfill the present requirements of daily science .

Scale	Frequencies	percentage
Strongly Disagree	0	0%
Disagree	1	2.5%
Undecided	3	7.5%
Agree	22	55%
Strongly Agree	14	35
Total	40	100%

8. Analysis of Global and national Policies with Primary Science Curriculum Terminal Competencies

(1) To show respect and tolerance to all irrespective of their nationality, religion, caste, sex and trust and faith on Almighty Allah is the terminal competency which is also focused on Universal Declaration on Human Rights article 26, International Convention on the Rights of the Child's article 8 and 28, World Declaration on Education for All's article 2.

(4) To know about the people develop imagination, curiosity and creativity is the terminal competency which is focused on World Declaration on Education for All's article 10, World Summit on Social Development's goal and Millennium Development Goals (8).

(6) To gain knowledge of science through acquiring knowledge of natural laws is the terminal competency which is focused on Education for All's goal 6, International Convention on the Rights of Child article 29(b) and World Declaration on Education for All article 1 (2).

(7) To form habit of solving problems and earn science-mindedness through the use of science principle methods and logical thinking is the competency which is indicated in National education policy 2010, Bangladesh.

(8) To acquire the basic skills of Bangla language and to use these skills efficiently in all walks of life is related to Universal Declaration of Human Rights article 1.

(12) To be able to solve mathematical problems through logical thinking is related with National education policy 2010, Bangladesh.

(14) To feel encouraged in independent and free thinking, and practice democratic principles and procedure is related with International Commission on Education for Twenty-First Century's identified field of Education and Work.

(15) To distinguish between right and wrong through acquiring moral and social qualities and use these in practical life is related with the development of child's personality that are focused in International Convention on the Rights of the Child's article 29 (a).

(16) To be careful in the use and conservation of personal, family, social and state properties is focused in Universal Declaration of Human Rights article 16, 18, 23 (2), International Convention on Education for Twenty-First Century's identified field of Education and Social Cohesion and The Delhi Declaration.

(18) To earn an attitude of sense of sacrifice through according preference to others, to demonstrate tolerance and acquire human qualities is focused in International Commission on Education's 2nd fundamental assumptions, International Convention on Education for Twenty-First Century's identified field of Education and Citizenship and The Delhi Declaration.

(20) To know adversities and disasters and be skilled in and self confident to face these is related with International Convention on Education for Twenty-First Century's identified field of Education and Citizenship and The Delhi Declaration.

(22) To know about and love nature, environment and universe; to be inspired to improve and conserve environment is the terminal competency which is related with Universal Declaration of Human Rights article 13 and with The Delhi Declaration.

(23) To play a positive role in tackling / facing the problems of changes in climate and weather is the terminal competency related with International Convention on Education for Twenty-First Century's identified field of Education and Citizenship.

(24) To know about the impact of population on the basic needs of people and environment; also know the importance of human resources is the terminal competency related with International Convention on the Rights of the Child's article 8 and 29 (c), International Convention on Education for Twenty-First Century's identified field of Education and Culture, World Declaration on Education for All article 1 (2), World Summit for Social Development's goal and the Delhi Declaration.

(26) To build the habit of safe and healthful living is related with International Commission on Education for the Twenty-First Century.

9. Result and discussion:

1. All terminal competencies of primary science curriculum of Bangladesh are focused in at least one selected global or national policies in education. Some terminal competencies are focused more than two global or national policies in education. It is very positive side for primary science curriculum though it is not enough sufficient according to most of the respondents who opined that global or national policies are focused but not enough in primary science curriculum competencies. Another factor is found by analyzing respondent's opinion that present science curriculum can't fulfill present global needs because many important global or national issues are ignored in terminal competencies.

2. The primary knowledge of globalization and global village and also brotherhood for development are focused (World Declaration on Education for All's article 10, World Summit on Social Development's goal and Millennium Development Goals) in terminal competencies but tension between global science and local as one of the main problems (International Commission on Education for the Twenty-First Century) is not considered in terminal competencies. According to most of the respondents, primary science curriculum emphasize on other countries people and create a sense of love and tenderness for universal brotherhood which is helpful to increase science knowledge of globalization and global village. So, it is obvious, considering the demand of this present era, essential science of globalization knowledge and brotherhood are included in primary science curriculum but ignore the negative impact of globalization especially tension between global science and local though it is very much important for students to know the both sides of globalization and science.

3. Showing respect and tolerance in daily science to all irrespective of their nationality, religion, caste and sex is the terminal competency of primary science curriculum which is also focused on Universal Declaration on Human Rights article 26, International Convention on the Rights of the Child's article 8 and 28, World Declaration on Education for All's article 2. Primary science curriculum also emphasize on that issues according to respondents.

4. Acquiring democratic norms and build up democratic society with daily science is a terminal competency which is also focused in International Commission on Education's 2nd fundamental assumptions, International Convention on Education for Twenty-First Century's identified field of Education and Citizenship and The Delhi Declaration. Analyzing respondents opinion, this competency is enough focused in science curriculum which help students to be democratic for being good citizen and build up democratic society with daily science.

5. Social and cultural values are very important factor to be a good citizen. It is focused in primary science curriculum competencies. And according to most of the respondents, this curriculum promotes student's social and cultural values and makes students conscious about daily science with political, socio-economic and cultural rights (UDHR 1948).

6. Various human rights and duties (Universal Declaration of Human Rights article 18, 25, and International Convention on the Rights of Child article 26.1) are placed in terminal competencies to make student conscious about daily science and others rights, duties and responsibilities. Unfortunately though it is eluded in terminal competencies but don't give sufficient focus in curriculum. According to respondents, it is found that primary science curriculum doesn't give sufficient focus to the awareness of student's own and others right with daily science, own duties and responsibilities.

7. Patriotism and nation building activities are very important for the development of a country with daily science. To be imbued with a sense of patriotism and nationalism in the spirit of liberation war and to take part in nation building activities imbued with a spirit of self-sacrifice are the terminal competencies related with International Convention on Education for Twenty-First Century's identified field of science Education and Citizenship and The Delhi Declaration. But it is found that in primary science curriculum, patriotism and nation building activities are included but not sufficient though it is highly focused in terminal competencies and global policies.

8. To be interested in science manual work and to be respectful to people living with daily science on manual work is a terminal competency which is related with International Commission on Education for Twenty-First Century's identified field of Education and Work. But it is found counting respondent's opinion that primary science curriculum is not giving enough importance to dignity of labor, especially manual work in science.

9. Primary Science Curriculum competencies are focused to science oriented national history, heritage of science, science culture and science literature which are related with International Convention on the Rights of the Child's article 8 and 29 (c), International Convention on Education for Twenty-First Century's identified field of Education and Culture, World Declaration on Education for All article-1 (2), World Summit for Social Development's goal and the Delhi Declaration. But according to respondents, curriculums don't focus enough to geographical position and features of Bangladesh, making students respectful about the national history, heritage of science, science culture and science literature. Another factor is not emphasizing tension between tradition and modernity (International Commission on Education for Twenty-First Century) in terminal competencies.

10. National wealth, social and national resources and development activities of locality (World Summit for Social Development, 1995) are emphasized in the primary science terminal competencies. But in rapid changeable societies, the science knowledge of fight against ever increasing rift, cope with changes and competence to do a join of work (International Convention on Education for Twenty-First Century) is not emphasized but it is needed for participate in the development work in future.

11. To be active in the development and preservation of the environment is the primary science terminal competency which is focused on International Convention on the Rights of the Child's article 29 (c), World Summit for Social Development's goal, Millennium Development Goals (7), goal of the Delhi Declaration. This terminal

competency is reflected in curriculum. Most of the respondents believe that Primary science curriculum focus enough on development and preservation of the environment, population problem for environment, know environment through observation and how to use various scientific information for environment safety.

12. To know and follow health rules with a view to ensuring healthful living is the primary science terminal competency which is focused in Education for All's goal 3, Universal Declaration of Human Rights article-25, International Convention on the Rights of the Child's article-24 and Millennium Development Goals 6. According to most of the respondents, primary science curriculum give enough emphasize on health rules with a view to ensuring healthful living.

10. Conclusion

Finally, Based on the overall discussion about collecting data and their interpretation tend to be accepted that SBK (primary science Knowledge) centers are now performing nationwide and creating a positive awareness among the community people. Primary Science is the study of political, economic, cultural and environmental aspects with science of societies in the past, present and future. It equips students with the science knowledge and understanding of the past necessary for coping with the present and planning for the future. It can play vital role to implement the global or national policies. In present dynamic world every country tries to develop a science curriculum that can fulfill the global or national needs considering global or national polices. Primary Science Curriculum of Bangladesh also has developed considering the global or national needs which we can understand by this research but not enough in some cases. Every terminal competencies of primary science curriculum are focused at least one global or national policy, some are focused more than two global policies which is very positive side but unfortunately, though global or national policies and needs are considering in primary science terminal competencies chart, but these are not sufficiently included in primary science curriculum though it is essential to meet with global or national challenge in 21st century. To make students aware about their right and enable them to face global challenge, primary science curriculum should more emphasize on child rights, human rights, legal status of children, gender, nutrition, health care, socialization, gender equality, reducing child mortality rates and fighting against disease, epidemics, global tension, norms and social values, social impact of climate change, nationalism and world brotherhood etc and add those skills as primary science terminal competencies. If those are not emphasized properly, we cannot expect our children to be prepared to understand or participate effectively with daily science in an increasingly complex science world. They need to encounter and reencounter, in a variety of contexts, the science knowledge, concepts, skills, and attitudes that will help to form a democratic society and peaceful living world.

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