



Transforming Education for a Better Future: SDG 4 in the Context of Agenda 2030

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Abstract

Quality education is fundamental to a child's development and future opportunities. Quality education helps all children to develop completely as a whole such as cognitive growth, social relationship building, emotional resilience building, mental development, and physical development without any basis of caste, race, gender, color, and socio-economic perspective. Education always develops empowerment, essential to live a successful life. It helps the individual to cope peacefully with any hard situations or circumstances. Quality education always helps to break the poverty line and inequality in society. To enhance the quality of education, a competent teacher's role is very important. Quality does not denote quantity; it only signifies how the students learn effectively and can achieve proper learning outcomes. The method of the work is a qualitative and descriptive study. The researcher collected data from secondary sources like various journals, articles, and websites. In this work the main focus is on SDG goal 4 (Quality Education), the targets of SDG goal 4, the positions of SDG goal 4 on an overall world basis, positions of India on SDG goal 4, some government initiatives for achieving quality education, some issues for achieving quality education in India, and how we can achieve SDG Goal 4.

Keywords: *Quality Education, empowerment, cognitive development, SDG goal 4, learning outcome.*

Introduction

Before the SDGs (Sustainable Development Goals), there were MDGs (Millennium Development Goals) and MDG came in the year 2000 in September. The period of MDGs was from 2000 to 2015. In MDGs, there are eight goals. In 2015, the MDG goal was agreed to be achieved. After MDG, the United Nations (UN) took on SDG which is popularly known as Agenda 2030 (UNDP, 2024) [1]. There are a total of 17 SDGs and each goal



is targeted to be achieved by the year 2030. The total number of targets under the SDGs is 169. 193 members of UN are involved to achieve all 17 goals within the year of 2030. For achieving SDGs, NITI Aayog play a very significant role. Therefore, SDG is a very extensive project than MDG (Mahajan, 58).

After knowing each and every goal of SDG; we can understand that, for achieving all SDG goals by 2030, Education is one of the most significant or vital and is needed for achieving most of the goals. Most of the goals are linked with the education (Agbedahin 2019, 4-5). Hence, this paper is mainly focused on SDG Goal 4, which is Quality Education – Ensure education accessible to everyone, fairness in education by providing support where needed, offering effective, relevant education and promote continuous education throughout life, adapting to changing needs and challenges for all. SDG Goal 4 aims that by 2030 all children must be able to access free and compulsory education from primary education to top level education irrespective of gender, caste, religion and from marginalized group of people or community (Saini et.al 2022, 2033). SDG Goal 4 has mainly 10 targets, which give more importance to children, youth and adults and give emphasis on continuous education (Boeren, 2019). SDG goal 4 also says that both learners, girls & boys must have access to vocational education and skill development for employment and jobs which is essential for fostering economic independence and improving individual's quality of life. As this goal promotes lifelong learning, it signifies adult literacy and mathematical ability. Even, the last Education Policy (NEP 2020), focuses on providing ample knowledge to all students through various skills and vocational skills. Our nation always aims to provide education for all students (Pandey, 2018; 6).

Our country, always tries to give basic education for both girl and boys children (Saxena, 2020; 89-90). SDG Goal 4 focuses on the marginalized group of people or community (Ydo, 2022).

Hence, the government of India aimed to reach quality education. Our government set up enormous schemes to bring quality education. Government launched enormous projects named as – SSA, RMSA, Right to Education, SWAYAM projects, National Literacy Mission and many scholarships for all disadvantaged students (Singh, 2022; 235). The five -year plan also focuses on to enhance learning prospects; and all sections of students must get same access for learning (Pandey, 2018; 6). Quality education aims to prepare all student in such a way; so that they can perform actively within the society and also can perform easily in future for getting jobs (Adipat and Chotikapanich, 2021; 175).

According to Rammohan (2018), stated that in northern India, women are lagging behind men. There is a lot of gender inequality. Women's schooling is very much poor than the men's schooling.

Muff et al. (2017), stated in their study that there are SDG 17 goals, and goal 4 deals with quality education. All students must access education without any kind of discrimination and all the students from disadvantaged groups such as scheduled caste, scheduled tribe, and disabled children must get the opportunities to get quality education. In SDG Goal 4, there are 3 objectives, which always help to achieve the 7 targets of SDG Goal 4.

Pandey (2018), stated that India is trying to make progress in Education for All Programs. The fundamental right is also implemented, so all students get free and compulsory education from 6 to 12 years. The government must look after various problems related to quality education.



According to Beena (2019), India has promised that by the year 2030, all children will be able to access equitable, quality, and inclusive education. That's why the government of India launched schemes of SSA, RTE, and RMSA for free and compulsory education to all students from primary to secondary education and also to enhance the retention, enrolment, and better infrastructure of students in schools.

Objectives of the Study

The objectives of the study are as follows: -

- To understand about the SDG 4 target.
- To identify the relation between the other Goals of SDG.
- To study the overall progress of SDG 4 all over India.
- To see the India's progress of SDG 4.
- To state various government schemes for achieving quality education in India.
- To understand some issues mainly in India for achieving quality education.

Methodology

This paper overviews the 'SDG 4(Quality Education): In the context of Agenda 2030'. This research work is qualitative and follows a descriptive method. The way of collection of information is secondary data and the facts were collected from sources such as - journals, articles, and websites.

Structure of the paper

The first sub-point discusses about SDG Goal 4 in introductory part. The second sub-point discusses about SDG Goal 4 Targets. The third sub-point discusses about the other SDGs Goal with SDG Goal 4. The fourth sub-point discusses about the overall Status of SDG Goal 4. The fifth sub-point discusses the status of India from the perspective of SDG Goal 4. The sixth sub-point discusses some government initiatives for achieving SDG Goal 4. The seventh sub-point has discussed some issues related to achieving quality education. The eighth sub-point discusses how we can achieve SDG Goal 4 easily. The 9th sub-point discusses based on the paper. The tenth sub-point discusses the conclusion.

- Targets of SDG Goal 4

In Sustainable Development Goal 4 there are 7 targets are discussed below: -

SDG Target 4.1 - This target says that by the year 2030, all the children both boys and girls get universal access to free primary & secondary education in a good quality manner without any discrimination and can achieve effective learning outcomes. Only, 56% of students were not able to read properly.

SDG Target 4.2- This target says that by the year 2030, all children, both boys and girls, should have access to high- quality pre-primary education facilitated by well-trained instructors. This ensures that every child is prepared for and can transition smoothly into primary education. Only, 17% of countries are legally stipulated for one year of free and compulsory education.



SDG Target 4.3- This target says that by the year 2030, all men and women can easily access reasonable price and high-quality technological, vocational and higher education. It is vital to decrease barriers to skill development, technological and hands-on learning & training from the beginning of secondary to higher education.

SDG Target 4.4- This target says that by the year 2030, the number of adults must increase in the area of technological & vocational skills so they get jobs. The training programs should be increased, so all youths, especially girls and women get the opportunities to gain various information, skills, and competency for getting employment. The youth must be able to easily access vocational training and can achieve high cognitive skills such as critical thinking, logical thinking, teamwork, problem-solving, and communication skills. Many adults are not competent in basic computer skills.

SDG Target 4.5- This target says that by the year 2030, all types of discrimination in education must be removed. This means that each girl, boy, man, and woman get an equal opportunity to receive higher education, vocational education in the perspective of caste, race, sexual category, age, pigment, creed, and language. Disadvantage groups, disabled individuals, and vulnerable populations need special attention. Only 66% of countries achieved primary education, 45% achieved lower secondary education, and 25% achieved upper secondary education.

SDG Target 4.6- This target says that by the year 2030, all individuals of all ages must have achieved basic reading and mathematical skills after the completion of primary education. The literacy rate is below 60% in low-income countries.

SDG Target 4.7- This target says that by the year 2030, all learners should acquire knowledge, skills, and values that support sustainable development through Education for Sustainable Development (ESD) and promotion of global citizenship such as peace, non-violence, and human rights. From the year 2009 to 2012, only 7% of teacher education programs covered ESD (Education for Sustainable Development).

(SDG 4: QUALITY EDUCATION, A4ID, Legal Guide 2022, 6-12)

Means of Implementation:

SDG Target 4. A- This target says that by 2030, an effective and safe learning environment is essential for nurturing academic, social, and emotional growth and proper physical infrastructure facilities for all pupil irrespective of any discrimination. Less than 3 quarters of primary schools have adequate infrastructure.

SDG Target 4. B - This target says that by the year 2020, there must be increase in the scholarships globally in both underdeveloped nations and first-world countries so that all students can enroll in higher education, vocational, engineering, scientific programs, and information & communication technology. The fellowships are very beneficial to the socio-economically disadvantaged groups. The scholarship is decreased by 4%.

SDG Target 4. C - This target says that by the year 2030, there must be increase in the qualified, trained and competent teachers in every educational institution by the international association to enhance the



professional development in both underdeveloped nations and first-world countries. The teachers need to achieve all the targets of SDG. Untrained teachers and less competent teachers cannot give quality education to teachers. Globally, 86% of teachers are trained only at the primary school level.

(SDG 4 Data Week, 2018, 7).

- SDG Goal 4 is closely interconnected with other Goals

Goal 1 (No Poverty) - With the help of goal 4, poverty can be removed, when all individuals can access quality education.

Goal 2 (Zero Hunger) - With the help of goal 4, all can access quality early childhood development.

Goal 3 (Good Health and Well-Being)- With the help of Goal 4, having or getting good health and well-being of sense will develop within all individuals.

Goal 5 (Gender Equality) - With the help of goal 4, gender inequality can be removed or decreased on any grounds. All people had the right to do any work, especially disadvantaged groups.

Goal 6 (Clean Water and Sanitation)- With the help of goal 4, all individuals develop the concept of safe and clean water and adequate sanitation facilities, essential for both girls and boys in schools, and other public places are crucial.

Goal 8 (Decent Work and Economic Growth) - With the help of goal 4, any knowledge and skills can be enhanced and employment can be increased.

Goal 9 (Industry, Innovation, and Infrastructure) - From goal 4, industrialization and various innovation and infrastructure facilities can be developed or enhanced.

Goal 10 (Reduced Inequalities) - With the help of goal 4, the inequalities and the concept of discrimination will be decreased or removed by allowing all people, especially women to do any kind of work and develop women's empowerment.

Goal 12 (Sustainable Consumption and Production) - The help of goal 4, gives knowledge and understanding about sustainable consumption and production of resources.

Goal 13 (Climate Change)- With the help of goal 4, people can be aware and develop a sense or concept about climate change and hazards, that hamper the world.

(SDG INDIA INDEX, 2018, 2)

- Overall Progress of SDG 4

In the year 2016, due to some reason, the millennium development goals cannot be achieved fully by the year 2015. In the year 2013, 59 million students did not attend primary school. Mostly, 20% of the students dropped out and 40% did not even attend school. The country Africa is facing such a problem. In the year 2013, 71% of teachers in sub-Saharan Africa and 84% in North Africa only fulfilled the national training



standards. In the year 2017, 263 million students were not attending schools. The World's 70% of the countries are Sub-Saharan Africa and South Asia. In only 60% of developing countries, primary and secondary schools can able to access computers and the internet for teaching, and below 40%, in Saharan countries. In the year 2018 it is seen that in 2016, only 70% achieved the rate in early children and primary education. In 2016, 85% of primary schools received training; however, the percentage was notably lower in regions such as South Asia and Sub-Saharan Africa. More than 50% were not capable to read and write and do mathematics. 750 million adults were illiterate. In the year 2020, due to covid 19, the learning outcomes of students are hampered. 773 million adults were lagging in basic reading and writing. In the year 2022, globally, only 10% of people have basic digital skills like sending emails to others and only 25% of primary schools are equipped with basic amenities such as drinking water, electricity, sanitation, and some technological facilities. In the year 2023, 84 million students are out of school and 300 million students do not have proper reading and writing skills. The facilities for disabled children are not in a good position and 14% of teachers are not so qualified properly. But in the year 2024, 58% of students can read by the end of primary education and there is a teacher shortage and insufficient training in Sub-Saharan Africa (Bhupinder, 2024; 172-173).

- **India's Progress of SDG 4**

Elementary education is a crucial foundation for the development of any nation. In India, significant issues persist, particularly in achieving the goal of education for all children. Gender disparities remain a critical challenge, with women's literacy lagging at 65.46% compared to men's 82.14% (2011 data). Despite improvements in enrollment, challenges in learning outcomes and infrastructure persist. In 2010, 4% of children aged 6-10 and 7% of children aged 11-14 were not enrolled in schools. While enrollment rose to 96.7% in 2011, foundational skills remained weak. For instance, Class 5 students struggled to read Class 2 textbooks, highlighting the poor academic performance identified by ASER 2011. Dropout rates also declined from 53.7% in 2010 to 48.2% in 2011, but regional disparities are stark. States like Himachal Pradesh show promise, with lower dropout rates and favorable student-teacher ratios. Conversely, regions such as Madhya Pradesh, Bihar, Jharkhand, and West Bengal face severe challenges. In Madhya Pradesh, literacy rates dropped from 67% in 2007 to 54.5% in 2011. Uttar Pradesh saw only 74.04% literacy in those aged above seven in 2011. Infrastructure inadequacies exacerbate these issues. Although 85% of educational institutes having facilities of drinking water, merely one-fourth have electricity, and 5.7% offer computer facilities. A striking concern is the lack of discrete latrines for young girl students in many elementary schools, with Uttar Pradesh reporting 81.7% of such schools lacking this basic facility. India's literacy growth from 2001 to 2011 was 9.2%, but this progress has slowed. Additionally, 26% of the population remains illiterate, and just 15% of students continue to high school. These gaps emphasize the need for urgent reforms to strengthen educational outcomes and address inequities in access, quality, and infrastructure. Improving teacher training, bridging gender disparities, and enhancing school amenities are essential for achieving equitable and inclusive education in India (Singh, 2013; 237-238).

- **Government Initiatives for achieving Quality Education**

India faces significant challenges in its elementary and secondary education system, particularly in government schools. Poor infrastructure, lack of innovative teaching methods, and inadequate facilities have resulted in subpar quality education. Rural schools suffer more acutely due to limited resources and teaching



innovations. Consequently, the Government of India has implemented several schemes and policies focused on enhancing access to quality education and achieving the Sustainable Development Goal (SDG) 4 targets, and fostering equitable education.

Key Government Initiatives:

Universalization of Elementary Education (UEE)- Initiated in 2001, UEE focuses on providing free and compulsory education for youngsters between the ages of 6 and 14 years. The scheme ensures that schools are accessible within walking distance, and it mandates five years of primary and three years of upper-primary education. UEE is directly linked to SDG Goal 4, Target 4.1, which promotes free, equitable, & excellence in primary and secondary education.

Sarva Shiksha Abhiyan (SSA) - Launched in 2001, SSA aims to achieve the objectives of UEE. It provides free and compulsory education for children in the 6-14 age group. This flagship program spearheaded by the former PM, Sri Atal Bihari Vajpayee is vital to achieving SDG Target 4.1.

The Right to Education (RTE) Act of 2009, passed by Parliament, ensures free and compulsory education for children between the ages of 6 and 14. It mandates a 25% reservation for underprivileged groups, including Scheduled Castes (SCs), Scheduled Tribes (STs), and children with disabilities addressing equity concerns under SDG Target 4.1.

Ishan Vikas and Ishan Uday Schemes - Designed for students from the Northeast, Ishan Vikas connects students with technical institutions like IITs and NITs (Target 4.1, 4.3). Meanwhile, IshanUday offers scholarships for families more than ₹4.5 lakh annually, fostering equitable educational opportunities under Targets 4.a, 4.b, and 4.5.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) - Launched in 2009, RMSA seeks to enhance secondary education quality and improve enrollment rates from 52% in 2009 to 75% by 2014. This scheme aims to ensure that secondary schools are accessible within a reasonable distance from every student's home and aligns with SDG 4 Target 4.1.

Rashtriya Avishkar Abhiyan (RAA) - Launched in 2015, RAA encourages children aged 6 to 18 to explore science, mathematics, and technology. Schools encourage students' participation in different scholastic competitions to foster innovation, aligning with SDG 4.

Samagra Shiksha Abhiyan - A comprehensive education scheme introduced in 2018, Samagra Shiksha aims to provide equitable, inclusive, and quality education from pre-primary to Class 12. It offers textbooks to students, remedial teaching to 1.3 crore children, and self-defense training for girls, addressing several SDG 4 Targets.

SAKSHAM - This scheme is given by AICTE. The primary objective of this scheme is to provide scholarships to students with disabilities, enabling them to pursue technical education. This scheme is related to SDG Target 4.6, 4. a, 4.b.



Beti Bachao Beti Padhao Abhiyan - This campaign, targeting 100 districts, promotes Girls' education and aims to address gender disparities in education. It contributes to multiple SDG 4 Targets, including 4.2, 4.5, and 4.7.

Mid-Day Meal Scheme - This program, initiated in 1995, combats malnutrition and encourages school enrollment among disadvantaged children. It is a momentous phase towards increasing student retention.

SWAYAM Programme - Through online learning facilitated by reputable university professors, SWAYAM provides free courses and affordable certifications. This initiative aligns with SDG Targets 4.2, 4.3, and 4.4.

Udaan Initiative - Run by CBSE, Udaan supports underprivileged girls in learning technical subjects like math and science. It advances SDG Targets 4.a, 4.b, and 4.6.

Digital and Technology-Based Education Initiatives:

National E-Library - The E-Library provides access to quality academic materials for students, teachers, and researchers through digital devices.

e-Pathshala - This digital platform offers textbooks, videos, and other educational resources to students and teachers.

Schemes for Girl Education:

Kasturba Gandhi Balika Vidyalaya (KGBV) - It established in 2004, offers residential school facilities specifically for girls in the disadvantaged rural areas, focusing on their educational development.

Mukhyamantri Balika Cycle Yojana - By providing bicycles to girls enrolled in Class 9 and 10, this scheme reduces dropout rates and ensures easy access to schools (Sengupta et. al, 2022; 2043-2045).

- **Issues related to achieving quality education**

India faces numerous challenges in its pursuit of quality education despite implementing various government initiatives. The struggle is particularly pronounced in village areas, where most of the pupils lack access to essential resources and equitable learning opportunities. The following are some of the main challenges that impede the attainment of quality education in India:

Lack of Funding

A major challenge faced in the education sector is the inadequate allocation of funds to schools, especially those in rural regions. Limited financial resources result in inadequate infrastructure, including outdated textbooks, poor drinking water systems, lack of electricity, insufficient classroom facilities, and non-existent libraries or computer labs. Schools also struggle to provide separate and functional toilets, a basic necessity that impacts the learning environment.

Infrastructure Deficiencies

Schools in rural areas face severe infrastructural shortcomings. Many students attend classes in unsafe, overcrowded classrooms without proper ventilation or learning materials. Essential amenities eg. clean drinkable water, electricity, and functional sanitation systems are either absent or inadequate. This neglect



creates an uninviting and unhealthy environment, making it challenging for children to focus on their studies.

Inequality and Accessibility

Socio-economic factors create significant barriers to quality education. Children from disadvantaged groups, marginalized communities, and low-income families face difficulties accessing proper schooling. Gender disparities persist in village, where female child are often denied education due to far reaches, meager conveyance amenities, or cultural prejudices. Many parents undervalue the importance of educating girls, instead prioritizing household chores over schooling. Disabled pupils face extra obstacles due to insufficient accessibility in schools and limited supportive facilities.

Teacher Training and Student-Teacher Ratio

Proper teacher training is crucial for quality education. However, many teachers, especially in rural areas, lack the necessary qualifications, skills, and training to effectively engage students. Modern teaching methods that integrate technology and promote active participation are rarely used. Compounding this issue is an imbalanced student-teacher ratio, with many schools operating far below the recommended 30:1 ratio, leading to overcrowded classrooms and reduced individual attention for students.

Outdated Curriculum

The curriculum in most government schools is outdated and heavily focused on rote memorization rather than critical thinking and problem-solving. This traditional approach fails to prepare students for the demands of modern society, depriving them of essential practical and analytical skills. A student-centered, interdisciplinary curriculum that aligns with contemporary societal needs is imperative for fostering holistic development.

Technological Limitations

Technological integration in education can enhance learning outcomes significantly. However, most rural schools lack access to basic technological tools such as computers and internet services due to funding shortages. The high cost of setting up and maintaining technological infrastructure further exacerbates the problem, leaving students in rural areas deprived of these modern learning resources.

Assessment and Evaluation Gaps

The traditional evaluation system used in most schools emphasizes rote memorization over practical knowledge and skills development. This assessment approach fails to evaluate the holistic growth of students and does not prepare them for real-world challenges. There is a pressing need to shift toward formative and competency-based evaluation methods that focus on critical thinking, creativity, and problem-solving skills.

Cultural and Societal Barriers

Cultural norms and societal attitudes significantly hinder education, particularly for girls. In remote areas, rigid societal beliefs often prevent girls from attending school, with families prioritizing domestic responsibilities over education. These attitudes are rooted in misconceptions about the value of educating



girls and perpetuate a cycle of inequality and limited opportunities for future generations (EuroSchoolblogs, 2024).

- **How can SDG Goal 4 be achieved?**

First of all, all schools and homes need to create a favorable environment. All (boys and girls) children should get equal opportunities for education in educational institutions from both villages & town or city areas. The second is, that all scholastic institutes should modify the curriculum according to the needs of society and students. The curriculum must be inclusive, equitable, and better quality. The *third* thing is that all educators should make use of appropriate lessons and methods, so all students will be able to know them easily and all teachers must be competent for using proper teaching methods. The *fourth* thing is that there should be effective communication between the students and teachers. As we know proper communication can enhance the teaching-learning process. The teacher should be kind to clear the doubt of a student and all students can easily clear or discuss various problems. The *fifth* point is being in good health. Having good health is very important for having an education. Good health always enhances or motivates the process of learning of the pupil and can be able to develop and think rationally and abstractly (Ossai, 2022). The gross enrolment ratio of girls in the overall category is 116.7 and the ratio of boys is 115.4 (Educational Statistics, MHRD, 2013, P-9).

Discussion

From the above study, it can be understood that, in the state of West Bengal the condition of rate of enrollment in schools is not in a good condition. It is necessary to increase the rate of enrollment in schools to achieve the target of 100. The states of Assam, Odisha, and Arunachal Pradesh are also in poor condition. The states of Himachal Pradesh and Pondicherry are trying to reduce the dropout rates of schools. In the state of Bihar, the higher education rates, literacy rates, teacher-student ratio, and gender disparity index need to be increased. The teacher training institutes need to be increased in the state of Assam. In India, the enrolment of disabled students needs to increase and the schools must provide essential assistance or support to all students for empowerment. In the schools, the basic infrastructure and sanitation facilities must be improved.

Conclusion

At last, we can say that to achieve SDG Goal 4 proper initiatives and various policies in education need to come into force for a quality education system. Already, the government has introduced several initiatives to ensure the provision of educational excellence, focusing on accessibility, inclusivity, and overall development then again have to take a lot of serious actions or steps for the states where the enrolment rates of schools are very low. To achieve SDG Goal 4, it is very necessary to create a very good environment and culture in schools, in which quality education will be very much effective and the instruction will also enhance for all students, and they can foster sustainable knowledge and understanding, which is essential for living in the future in a good way and being responsible human beings.



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