

Exploring the Role of Teachers in Promoting SDG 4: Quality Education and Lifelong Learning in the Classroom

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ABSTRACT

This study explores the role of prospective teachers in promoting Sustainable Development Goal 4 (SDG4) focused on quality education and lifelong learning in classrooms. The objective was to understand how teachers, as key actors, can foster inclusive, equitable, and quality education through their pedagogical practices. A qualitative phenomenological approach was employed, utilizing semi-structured interviews with 09 prospective teachers enrolled in teacher education programs at universities in Karachi, Pakistan. The data collection involved open-ended questions and interview probes to gain in-depth insights. Findings indicated that prospective teachers recognize the importance of promoting quality education in terms of sustainable development goal no 4s. Active learning methods, technology integration, and continuous professional development were highlighted as essential strategies for promoting SDG4. However, challenges such as large class sizes, limited resources, and differing student abilities were identified. The study recommends investment in teacher training, resource allocation, and policy changes to overcome these barriers and support the achievement of SDG4.

Keywords: SDG4, Quality Education, Lifelong Learning, Pedagogies

INTRODUCTION

Role of teachers in promoting Sustainable Development Goals especially (SDG 4) by fostering an inclusive, equitable, and quality education system that empowers students with the knowledge, skills, and values which are important for the lifelong learning and global citizenship. In the modern fast world, teachers and their role in supporting quality education and lifelong learning have never been more vital than before. Teachers are not merely carriers of knowledge, but they are the major character in the development of their students in future (Stronge, 2018). The education world is in a dynamic state as societies are increasingly becoming more digitalized and globalized. It is this dynamic environment that would require the use of new teaching methodologies, the application of technology, as well as the emphasis on teacher professional growth with the necessary aim of enabling quality education to be provided to every student. Quality education forms a vital basis of personal development, societal growth and economic growth. As UNESCO (2020) explains, quality education not only entails acquisition of knowledge but also development of skills and competencies that can make individuals contribute in a

significant way towards their communities. Quality education also focuses on giving equal opportunity of learning to the students irrespective of their social and economic statuses and location. The teachers have a crucial role of applying different pedagogical methods to meet the needs of different students in order to make the process of learning interesting and helpful (Narzulloevna et al., 2020).

The conventional learning processes tend to embrace a form of passive learning where students learn with no active participation. Nevertheless, modern studies emphasize the significance of active learning techniques that ensure the development of critical thinking and creativity and problem-solving abilities (Felder & Brent, 2009). Such approaches are collaborative, enquiry-based learning, and project-based learning, which all promote students owning their learning. Further, differentiation instruction is one of the effective methods of meeting different learning needs in classrooms. The more teachers can adjust their instruction methods to suit individual learning styles and learning abilities of their students, the higher the chances that an inclusive and effective learning process will be established (Tomlinson, 2014).

Integration of technology in classrooms has been one of the greatest changes in education that has been witnessed in recent years. The world has witnessed the revolution of digital tools and resources in the process of teaching and learning by teachers and students respectively. Online resources and interactive whiteboards are not the only way to make the learning experience more robust and effective, and technology provides unlimited possibilities (Kharchenko et al., 2024). It enables teachers to design personal learning experiences and get access to an extensive pool of information that can be used to assist students build their skills. Also, technology can help fill in the distance between students in remote or underserved regions, and they will be able to access quality education, which they may be otherwise deprived of. Nonetheless, to make technology effective in enhancing quality education, teachers should be able to adopt it in their practice by equipping them with the skills needed in the process (Liu et al., 2024).

Another important issue in enhancing quality education is teacher professional development. Ongoing school improvement helps teachers to be informed on the emerging trends in pedagogy, and teaching methods as well as technological improvements. It has been demonstrated that instructors that participate in continuous professional development become more productive in their work (Darling-Hammond et al., 2017). Some examples include workshops, seminars, collaboration with peers, and web-based courses as the many ways in which professional development programs can be carried out. Such opportunities will enable the teachers to look back at their practice, learn with their colleagues, and consider new methods to improve student learning outcomes.

In addition, despite the possible benefits of innovative teaching practice, in case teachers are not provided with the necessary support and resources to develop, many challenges exist throughout the education sector (Maass et al., 2019). The inequality in access to quality education, especially in the impoverished regions of the country, is one of the most urgent problems. In most cases, teachers have insufficient resources, lack of proper infrastructure and huge classes, which may not enable them to impart lessons in a practical manner. In addition, in most regions of the world, educators receive low pay and work too much, which causes burnout and demotivation (World Bank, 2017). To overcome these challenges, it is necessary to implement extensive policy changes which focus on the interests of teachers and students. As an example, the governments and learning institutions have to invest in resources, offer teachers with professional development opportunities and make educational technology accessible to every student (McAleavy et al., 2018).

The role of the teachers is central in determining the future of the education system through enhancing the provision of quality education as well as encouraging the students to learn throughout their lives. Teachers can be able to do this by using innovative teaching strategies, integrating technology in the

teaching processes and continual professional growth to provide dynamic learning in ways that motivate students to achieve their potentials (Abdalina et al., 2022). Nevertheless, to be successful in their struggle teachers require the assistance of educational systems, policymakers, and communities. These issues can be met and our future can be to make sure that quality education continues to be realistic to all the students by making sure that there is investment being made in the developments of the teachers. The role of Teachers in enhancing Sustainable Development Goals and Goal 4 which relates to Quality Education and Lifelong Learning of students in the Classroom. Therefore, the proposed research is aimed at exploring the perspectives of the prospective teachers studying in the Karachi universities in Pakistan on the role of teachers in promoting Sustainable Development Goals, especially Goal 4 based on Quality Education and Lifelong Learning of students in classroom.

RELATED LITERATURE REVIEW

Quality Education

Quality education and lifelong learning are two basic elements that drive the development of people, societies, and humanity. The connection of the two has gained increased importance particularly in the contemporary world with education systems trying to equip individuals with all the challenges of the fast changing global economy. Quality education will also entail the learning of knowledge not only by heart but also by critical thinking, creativity, and skills that can be used to survive in knowledge-based economy. On the contrary, lifelong learning is a lifelong learning process and makes an individual flexible, competent and interested in the surrounding environment. Quality education can be characterized in different ways such as being equitable, accessible and inclusive of learning opportunities. UNESCO (2015) suggests that the quality education must not only guarantee academic achievement, but also personal growth, social inclusion, and the capacity to make a valuable contribution to society. The concept of the United Nations Sustainable Development Goal (SDG) 4 is focused on achieving universal and equitable quality education and facilitating lifelong learning accessibility to every individual (UNESCO 2015). To attain this, educational systems need to be learner centred whereby the students are actively involved in the learning process. This involves teaching skills that allow a person to operate in the complexity of the modern world such as problem-solving, communication, collaboration, and critical thinking (OECD 2019).

Lifelong learning lays stress on the importance of learning outside of the learning environment. Lifelong learning is not just an extension of education but also a mentality that can make the person pursue knowledge in his or her life (Dohn et al., 2020). Lifelong learning has a variety of learning activities that involve formal education, informal learning as well as non-formal learning opportunities. This practice is indicative of a move towards the old conception of education as a life cycle that concludes with graduation to the concept of learning as a continued process in different situations throughout one's life (Jarvis, 2006). Technological integration of education has been an influencer of lifelong learning and quality education. The use of technology has changed the manner in which individuals access and use knowledge. Online learning platforms, interactive learning content, and social media are digital tools that have opened new opportunities in education and collaboration. Arkorful and Abaidoo (2015) argue that technology in education could help to increase the engagement level of students, improve personalized learning, and access numerous resources that were not accessible before. Nevertheless, to ensure that technology becomes an effective tool in both advancing quality education and lifelong learning, an educator needs to be trained on the application of technology, and the students need to have access to the digital resources (Kalyani, 2024).

Even with these developments, the question still arises on how quality education and lifelong learning can be evenly integrated. The lack of educational access, especially in developing nations, remains to be a problem due to poverty and gender factors, as well as the geographic position (World Bank, 2017). Furthermore, the high rate of technological advancement implies that the education system needs to keep changing at all times in order to make sure that the students obtain the skills needed in the future labour market. This demands constant investment in teacher professional development, curriculum development, and the upgrade of infrastructure (Darling-Hammond et al., 2017). Moreover, lifelong learning as a culture should be promoted through the collaborative efforts of governments, education institutions, employers, and individuals, so that an individual can consider learning opportunities as easily accessible and free of any background-related obstacles. The quests of good education and lifelong learning are critical towards the development of sustainable growth and empowerment of individuals. The two concepts are linked together, where quality education lays the basis of lifelong learning, and lifelong learning makes people flexible and active in their learning processes (Gouthro, 2022).

Teaching methods for Awareness of SDG4

Instructional practices are important in determining the learning process and performance of students. With the changes in educational environment with technological developments and social transformations, the methods of teaching also change. Recent studies focus on the necessity to implement various; student-centred approaches to teaching that will accommodate diverse learning needs and preferences of students. The transition of the old-fashioned approach to the teaching process, which is based on lectures, to more dynamic and participative approaches is an important phenomenon in the field of education. The methods of active learning which include group discussions, problem solving and practical activities are now at the focus of the contemporary teaching approaches (Felder & Brent, 2009). These techniques stimulate critical thinking by the students on the material leading to better comprehension and memorization. Enquiry-based learning is one of the most popular pedagogies that are discussed and which encourages curiosity and thinking skills in students through asking questions and searching solutions themselves.

Learn (2000) explain that enquiry-based learning does not only facilitate problem solving skills but also improves the capability of students to relate theory and practical applications. The approach will motivate the students to engage in the learning process and thus enhance their self-efficacy and motivation to do so. Moreover, it has also been found out that enquiry based learning facilitates the long term retention of the information since the students are actively engaged in the learning process (Hattie, 2008).

Another teaching strategy that proves to be effective is project-based learning (PBL) which focuses on collaboration of students and practical usage of knowledge. PBL is based on real-world projects, in which the students are required to use skills and knowledge in various fields. Thomas (2000) argues that PBL encourages critical thinking, creativity, and collaboration, which are all vital in the 21st century labour force. PBL also gives students a chance to train their problem-solving skills and acquire the knowledge of how to use their time and resources productively. This approach has been especially effective in producing 21st century skills which are essential in career success. Education has been redefined by the introduction of technology in the teaching process. Teachers will be able to design interactive and personalized learning environments to their students with the introduction of digital tools, online platforms, and multimedia resources (Kem, 2022).

Technology is also a source of information and resources that are not limited to the traditional textbooks and allow the students to delve deeper into the subject of study and understand different standpoints of the topic. Besides, it is demonstrated that educational technology enhances student interaction and offers a

wider range of collaboration options (Hattie 2015). Even though innovative teaching methods have certain advantages, there are still some problems with the popularization of these approaches. Amongst the major obstacles is the absence of training and professional growth of teachers to accommodate such practices. According to Darling-Hammond et al. (2017), educators that obtain continuous professional development are in a better position to adopt efficient instructional approaches and enhance the performance of their students. Also, certain teachers can be opposed to change because of traditional education paradigm, the lack of materials, or huge classes. To mitigate these barriers, it is essential to do a significant change in the policy and have the support of the academic institutions and communities to enable the teachers to possess the tools and knowledge to apply these methods (Hénard & Roseveare, 2012).

The way of teaching is a key factor that determines the learning experiences and results of students. A shift to student-centred, active and enquiry-based learning strategies has had marked potential in supporting critical thinking, ability to solve problems and knowledge long-term. On top of these approaches, the adoption of technology adds to the learning process to give the student more access to the information and collaboration opportunities. Nevertheless, to implement these methods successfully, it is necessary to eliminate the obstacles associated with teacher training, resources, and resistance to change (Rahmadani et al., 2025).

Challenges and Solutions in Implementing SDG4

The education system is facing a number of challenges that SDG4, in its pursuit to guarantee inclusive and equitable quality education, poses. Despite the universally known goal, its application is under a complex set of challenges that have to be overcome to guarantee the positive educational results of the whole population. The inequality in access to quality education especially in low-income and rural regions is one of the major challenges. Millions of children, most of them in sub-Saharan Africa and South Asia, continue to remain out of school due to specific reasons like poverty and conflict, gender inequality and lack of proper educational facilities (Altinok et al., 2018). This inaccessibility results in failure by such regions to achieve the SDG4 targets and this cycle of inequality continues, and the development of human capital is constrained.

After the growth in the rate of enrolment, education standards in most of the world are still low. The performance of the education system in several low-income countries is compromised by overcrowded classrooms, outdated curricula, and the lack of qualified teachers (World Bank, 2017). Moreover, the introduction of new technologies and innovative methods of teaching, which is necessary to improve the quality of academic performance, is slow and disproportionate. In numerous circumstances, educators do not have access to digital technology, and a high level of digital divide strengthens the inequity in education (UNESCO, 2020). It is especially this digital divide which is noticeable when it comes to rural and disadvantaged regions; in these regions, Internet and modern learning technologies are not readily available.

Despite the international commitments to allocate more funds to education, funding is still inadequate and especially in third world countries. According to the World Bank (2017), a lot of countries have problems with allocating enough funds to meet SDG4, particularly due to the presence of other priorities, such as health and infrastructure. Additionally, the education sector has also been slow in receiving international aid over the past years and as such, the developing countries are finding it hard to invest in the growth and advancement of their education systems. There are some solutions suggested to address these challenges. First, to tackle the issue of access to education, there needs to be an investment in infrastructure, which means constructing schools in rural communities, transporting students, and gender inequality in

education. The governments and the international organizations should also collaborate on ensuring that no child is left without education due to any reason including poverty or conflict (UNICEF, 2019). Moreover, another way of enhancing the quality of education is enhancement of teacher training, revising curriculum, and incorporation of technology in the classroom to increase the learning process (Akram et al., 2022). Mobile technology and online learning platforms have demonstrated the potential in increasing the access to quality education in the remote locations (UNESCO 2020).

Financing issues should be addressed by investing more in the education sector within the country and providing more funding to support education, especially to the most vulnerable populations (Bray & Lillis, 2016). Some of the major issues that are confronting the implementation of SDG4 are inequality in access, low quality of education and insufficiency in financing. With the help of specific investments, better teacher training, and more creative ways of learning, one can get close to inclusive and equitable quality education among all students. These challenges can only be overcome through collaborative efforts between governments, international organizations, and local communities that will contribute to the achievement of the goals of SDG4 (Kolachi et al., 2024).

Material and Methods

The given qualitative phenomenological research examines the role of prospective teachers in the promotion of SDG 4: Quality Education and Lifelong Learning in educational institutions. This paper focuses on the orientations of prospective teachers on the essential elements of quality education and what the participants consider as the methods that can be used to foster lifelong learning in classrooms. In accordance with the steps introduced by Creswell et al. (2011) and Walsham (1995), the research used an interview protocol as a major instrument of data collection. The author also insists that open-ended questions should be included in the interview protocols to enable collecting rich and detailed data and eventually gain a better understanding of what the participants perceive in an actual setting (Creswell and Creswell, 2017). Open ended questions were intended to study the knowledge of the prospective teachers on their role in inculcating good classroom education where probes and prompts were made to help bring out detailed information of the participants. The research was carried out on the potential teachers who were pursuing teacher education programs in Pakistani universities in Karachi. The study was conducted among 11 potential teachers who were carefully chosen, and semi-structured individual interviews were conducted to obtain information that would be all-encompassing. The 20-30 minutes interviews were recorded so that an accurate record of the responses of the participants is achieved. After the interviews, the researcher transcribed the recordings and provided the participants with the transcripts which the participants reviewed to validate. This was done to enable participants to check and where there was need to correct the transcriptions in order to be sure that the data was perfect. The number of 11 participants is sufficient in accordance with the recommendations of Fraenkel, Wallen, and Hyun (2012), Cohen, Manion, and Morrison (2007) and Creswell (2014) that suggest a 1 to 20 participants sample in qualitative research. The two interviews were a pilot studies with the other nine the main study. These aspects were strictly tested to validate and ascertain reliability of the interview protocol before the main study interviews. There were no cases where the participants had not given informed consent, and it was guaranteed to all the participants that they could leave the study at any time without any repercussions. Participants were free to participate in the study and confidentiality was assured to them during the research process.

Findings of the Study

The study's findings are presented according to the themes that emerged from the interviews:

Quality Education

Lifelong learning and quality education are the major drivers of personal and social growth in the modern globalized economy which is dynamic and rapidly evolving. Quality education is not just rote learning but also critical thinking, creativity and practical skills which are necessary to survive in knowledge based economy. It also focuses on equity, accessibility and inclusiveness and guarantees not only academic achievement but also personal accountability, social integration as well as significant contribution to the society. Continuous learning, which is called lifelong learning, increases the adaptability and competence of a person. Upon request, "How well are you acquainted with SDG 4 (Quality Education and Lifelong Learning). Participant 2 said:

" I am familiar with it because I am also doing a B.Ed. SDG 4 means everyone should get equal education whether someone has a neurological disability or a physical disability. SDG 4 means that everyone should receive education according to their needs, in a way that is easy for them. For example, if someone has a physical issue, they cannot work in the same way as a normal child. Every student should receive education according to their own requirements. SDG 4 talks about equal and quality education, which is obviously very important for the future of education. When we plan for SDG 4, we also keep the future perspective in mind, so this factor must be considered".

Participant 4 described her perspective in the following ways:

"As quality education, this aim actually has started before, if I give you the brief history of it. It is aligned with the MDG's goal, which was really having the different name, which name was that the quality insurance could be of no gender discrimination and the quality education should be given to everyone. And also it has started from here when the education for all was started from the UNESCO system. So the quality education for me is having quality in your life and equips yourself with the skills".

Respondent 7 said in following:

"I am somewhat familiar with SDG 4. It is directly related to my profession as an educator. SDG 4 emphasizes inclusive, equitable, and quality education and promotes opportunities for lifelong learning for all. In my teacher education program, we often discuss how these global goals connect to classroom practices. SDG 4 means ensuring that every child has access to meaningful, engaging, and inclusive learning opportunities. It is not only about helping students achieve high grades but also about instilling life skills and values in them".

Teaching Methods for Promoting SDG4

Effective teaching practices are important to define the learning and performance of the students. Since learning in the changing world is changing alongside technology and societal transformations, teaching strategies have to change to accommodate different needs of the students and their sensitization concerning SDG4. The change in the old methods of teaching that was based on lectures to new methods that are more interactive and student-focused is crucial in the contemporary education. The methods of active learning, including group discussions, problem-solving, and practical activities, are becoming more focused since they involve students and help them think critically. These techniques will improve the understanding and recall of information, and inquiry-based education will help to stimulate curiosity and critical thinking because these educational approaches will teach students to question and find their answers on their own.

Participant 3 stated in the following words:

“I would use strategies according to the needs. For example, we studied the UDL (Universal Design for Learning) approach, which I can apply in an inclusive education environment. UDL allows flexibility students can answer in their own way, whether through drawing, writing, reading, or speaking”.

Participant no 5 replied:

“I use a mix of student-centered approaches such as inquiry-based learning, cooperative learning, and differentiated instruction. I integrate technology where appropriate and encourage discussions, critical thinking, and problem-solving activities. I also provide regular feedback and create a supportive environment where students feel confident to express themselves and ask questions”.

Participant no 9 stated:

“As a teacher, my role is to make learning accessible, engaging, and inclusive. This means adapting my teaching to the diverse needs of students, encouraging active participation, and making sure no student is left behind. By fostering curiosity and flexibility, I help students not just pass exams but also build skills that prepare them for lifelong learning. I use a mix of student-centered approaches such as inquiry-based learning, cooperative learning, and differentiated instruction. I integrate technology where appropriate and encourage discussions, critical thinking, and problem-solving activities. I also provide regular feedback and create a supportive environment where students feel confident to express themselves and ask questions”.

Challenges and Solutions in Implementing SDG4

The education system faces numerous challenges in achieving SDG 4, particularly in ensuring inclusive and equitable access to quality education for all. One of the most significant barriers is the inequality in educational opportunities, especially in low-income and rural areas. Many children, particularly in sub-Saharan Africa and South Asia, remain out of school due to factors such as poverty, conflict, gender inequality, and lack of proper educational facilities. This inaccessibility hinders the achievement of SDG 4 targets, perpetuating a cycle of inequality and limiting the development of human capital in these regions. Overcoming these challenges is crucial for realizing the goal of quality education for all.

Respondent no 6 replied:

“Yes of course I face challenges such as large class sizes, limited resources, and varying student abilities. It often makes it difficult to provide equal attention to all learners. I try to overcome these challenges by planning lessons carefully, using differentiated instruction, and creating peer-support systems where students help each other. Continuous professional development also helps me adapt to these challenges”.

Participant no 8 highlighted the Challenges and Solutions in Implementing SDG4:

“Yes, obviously there are challenges such as lack of resources, large class sizes, and differences in students’ abilities. Ensuring quality education for every child in an inclusive environment is difficult. To overcome this, we need to work on arranging resources and utilizing whatever resources we already have effectively to provide better learning. They can support teachers by investing in professional development, providing sufficient teaching resources, and reducing class sizes. Policies should focus on making education inclusive and equitable. Governments should also ensure fair compensation and recognition for teachers, as motivated and well-supported teachers are the key drivers of quality education”.

Participant no 01 stated the Challenges and Solutions in Implementing SDG4:

“I believe that as a teacher, I am not just teaching a curriculum but shaping future citizens. Promoting SDG 4 is part of my everyday work, whether it is by encouraging a struggling student, introducing innovative teaching methods, or simply creating a safe and inclusive classroom environment. Quality education and lifelong learning are the most powerful tools we can provide to our students, and I feel proud to contribute to this goal. They can support teachers by providing resources, reducing class sizes, offering continuous professional development programs, and ensuring equal opportunities for all regardless of background”.

Discussion

Teachers play an important role in ensuring that the Sustainable Development Goal 4 (SDG 4) aims at achieving inclusive, equitable, and quality education and lifelong learning opportunities to all people, which is essential in shaping future societies. In this respect, teachers are not only carriers of knowledge; they are direct facilitators, who can directly affect personal, social and intellectual growth of students. It has been found to be particularly so in the ever-evolving global environment where the digitalization and the globalization means that modern teaching techniques, technology, and professional growth must be incorporated in order to establish dynamic learning environments. A major area that the article brings to the fore is the change in passive learning to active learning practices. Conventional pedagogical methods frequently presuppose passive reception of the information by the students, whereas contemporary tools of education stress on their involvement and critical thinking. Inquiry-based learning, project-based learning along with other collaborative approaches are sure to make students active contributors to their learning. These methods can not only increase the retention of the information but also provide students with such important skills as problem-solving and creativity which are invaluable in the world nowadays (Felder and Brent, 2009; Tomlinson, 2014).

Education has also been brought closer as technology has transformed the teaching and learning process. By embracing digital technologies and resources, teachers will be able to customize the learning process and eliminate the disparities in accessibility, particularly among students living in remote or underserved areas (Kharchenko et al., 2024). Nevertheless, there are the challenges associated with integration of technology. According to the article, teachers need to be provided with skills that will allow them to apply these technologies efficiently, which cannot be achieved without continuous professional growth. Even the most innovative technologies are not likely to contribute to the desired educational outcomes without proper training (Liu et al., 2024).

Professional development of teachers is another important factor in marketing SDG 4. Teachers must keep up with the changing pedagogical practices and technological changes through continuous growth and learning. Research indicates that teachers involved in professional development programs are more effective and productive at their classrooms (Darling-Hammond et al., 2017). These programs may be in diverse forms, be it workshops, seminars, online courses but they equip teachers with tools of how to improve their teaching practice and eventually lead to better student learning outcomes.

Nonetheless, the research also reveals that there are serious obstacles which prevent the complete implementation of SDG 4. One of the most urgent problems is inequality in the provision of education, especially in rural and low-income regions. Poverty, gender discrimination, and absence of the right infrastructure are some of the impediments that many students in these areas are subjected to as they cannot access good education. Besides, the high number of students per classroom, the lack of educational resources, and poor teacher salaries are other factors that lead to burnouts and demotivation's among teachers (World Bank, 2017). These issues will have to be addressed at the local, national and international levels through coordinated efforts such as investing in infrastructure, training of teachers and policies that will provide equal opportunities to every student to access education. The recommendations that have been made in the study highlight that the strategic policy decisions that should take place lay in

the context of making the provision of the required resources, decreasing the number of classes, and equitable teacher's compensation. To establish an environment promoting quality education to everyone, governments and learning institutions should collaborate and invest in teacher training and educational technologies (McAleavy et al., 2018). Continuous professional development, according to one of the participants in the study, can assist the teachers to adjust to the problems, including large classes and diverse needs of students, by providing them with the knowledge they need to be able to use differentiated instruction successfully (Tomlinson, 2014).

The teachers have a central role to play in advancing SDG 4 through adjustment to the new teaching approaches, the use of technology, and professional development. Although the issues are many, potential of attaining quality education through partnerships, teacher education and inclusive policies that guarantee access to education by all students irrespective of their socio-economic status are enormous.

Conclusion

The contribution of the teachers to SDG 4, Quality Education and Lifelong Learning, cannot be ignored to establish a fair and inclusive education system. The results of this research point to the complex aspects of how potential teachers view and apply the principles of SDG 4 in their classes. Teachers are concerned with quality education as not only academic success but also personal and social development, which is lifelong learning. Active learning, inquiry-based learning and differentiated instruction are some of the most important teaching strategies that help in solving the various needs of the students and enabling them to think critically. These teaching practices are further improved by the introduction of technology and provide students with a personalized experience of learning and help to bridge the digital divide. Nevertheless, issues like limited resources, the large number of students in classes and unequal access to education in the under-service areas are still major obstacles. These issues do not allow attaining SDG 4 fullest and necessitate the joint actions of governments, educational institutions and community to make quality education available to every student, irrespective of their socio-economic status and geographical location. The paper highlights the importance of lifelong learning among educators and proper assistance by educational systems to help them avoid or reduce these issues. Altogether, the results indicate that the implementation of SDG 4 needs to be committed by educators, include the incorporation of inclusive instructional plans, and invest in resources and infrastructure.

Recommendations

Following are the recommendations of the study based on the findings:

- Offer professional development courses to train the teachers on skills required to be able to promote student-centred and inquiry based learning.
- Invest in technology and digital capabilities in education and, especially, to underserved areas, to close the digital gap and provide equal opportunities to access quality education.
- Make sure that teaching materials are available, decrease classes, and provide learning conditions that help to teach and provide individual attention.
- Promote the use of inclusive instruction methods, including the Universal Design to Learning (UDL), to support the diverse learning requirements and capabilities.
- Encourage cooperation between teachers by using peer support networks and co-teaching instructional models to exchange teaching materials and methods of addressing difficult situations in the classroom.
- One should invest enough funds in education, especially in the rural and low-income regions to provide infrastructure and improve the quality of education.
- Enhance policies that will encourage teachers through decent pay and reward and by trimming down the administrative weight, so that teachers will be motivated and concentrate on their work.

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