

SINGLE NATIONAL CURRICULUM: CAPACITY BUILDING OF TEACHERS AT PRIMARY LEVELMamuna Batool¹, Dr. Ajaz Shaheen², Dr. Muhammad Nadeem Iqbal*³**Original Article**

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ABSTRACT

This research study was conducted to investigate how the capacity of primary school teachers can be built in terms of the Single National Curriculum. The specific objectives of the study were: 1) To develop Teaching Module for capacity building of teachers toward science in terms of Single National Curriculum, 2) To implement the Teaching Module to develop the capacity building of teachers toward science in terms of Single National Curriculum 3) To assess the capacity building of teachers toward science before and after the implementation of Teaching Module. The researcher employed a quasi-experimental "pretest-posttest control group design." The "Teaching Module of Science for Class Five" was the study's primary resource. Fifteen (15) female teachers from the Govt. Girls Middle School Churata No. 3, Tehsil, and District D.G. Khan were chosen for this study. Results revealed that developed module was effective for capacity building of teachers in single national curriculum at primary level.

Keywords: Single National Curriculum, Capacity Building, Primary Teachers

INTRODUCTION

Education is the substructure of development. No nation can grow without healthy and perfect education. Education has over the years been given much concentration and precedence in Asian countries, especially in Pakistan, the Government at all levels has detected that the quality of education offered in Pakistani educational system decides the quality of development experienced. The basic purpose of education is to help students to improve their lives. It's possible that fresh perspectives will emerge. In this sense, one of the most effective and vital resources is the curriculum (McNeil, 2014).

The three most crucial elements of the learning process are the teacher, the student, and the curriculum (Hafeez et al., 2020). One of the components is the curriculum, which is a nation's official, school-based, and nationwide educational plan (McLachlan et al., 2010). The curriculum serves as a planning and learning experience that aims to answer the question "what" (Demirel, 2020). It also include putting into practice instructional strategies, teaching and learning techniques, educational resources and advice on how to apply them, course material, evaluation and assessment procedures, and curriculum management techniques (Demeuse & Strauven, 2016).

The curricula were created for various grades (Carl, 2005). It is possible to think of the curriculum as a set of ideas that are woven into the fabric of the school as a whole through the usage of curriculum materials (textbooks, instructional design, syllabus). The question of what information is the most useful will always remain, regardless of the curriculum-making tradition you adhere to: is it humanistic, experiential, humanistic, based on social reconstruction, or based on social efficiency? What qualifications ought to or need not be listed on a candidate's resume? "Curriculum settlements depend on which versions of knowledge are chosen, categorized, framed, and ultimately changed into realized forms of knowledge, skill, competence, and intellectual exertion" (Deng & Luke, 2008).

The fundamental ideologies of a nation, including its values, ethics, customs, educational goals, and mindset, are reflected in the national curriculum. In other words, even if it uses a range of curricula and syllabi, the national curriculum consistently covers the past, present, and future of a state. It is generally acknowledged that the national curriculum cannot be fully applied in a local setting. According to various studies, curriculum modifications have occurred because of things like student needs and characteristics, school and classroom circumstances, and instructor qualifications (Bass & Entürk, 2019; Datnow & Castellano, 2000; Li & Harfitt, 2017; 2018; Reisman, 2012; Remillard, 2005; Shower, 2010; Tokgöz, 2013). Depending on the teaching abilities and subject-matter expertise of the teachers, curriculum adaption is a challenging task. Through this approach, teachers show a commitment to education by maintaining the link between the intended curriculum and its implementation in the classroom. For enhancing and maintaining the level of education provided to pupils with socioeconomic challenges, this endeavor is extremely important. Different societal segments create a range of prejudices, misunderstandings, complexes, and divides as a result of the education systems within a single nation's curriculum. The nation's single curriculum has an impact on the attitudes, actions, and thinking of the populace.

Single National Curriculum

The Single National Curriculum has been one of the most widely anticipated projects by the Ministry of Education in Pakistan since the new government assumed office with educational reforms at the top of its agenda. When the Single National Curriculum was first introduced, the government said it was the first curriculum in Pakistani history to bring the entire nation together around a single curriculum for all facets of society. The government's choice to adopt a solitary national curriculum was a topic of intense debate for a number of months. The introduction of the Single National Curricular was restricted to the public school sector only after academics and educationalists opposed many curriculum elements. One of the primary points of the ruling party's agenda in Pakistan is the creation of a single national curriculum (Sehgal, 2021). Pakistan's government plans to implement the Single National Curriculum in stages.

The primary level began using the first phase of a single national curriculum in April 2021. New textbooks were released the previous academic year to support the Single National Curriculum, which at the start of the year sparked criticism throughout the country. Shafqat Mehmood, the Federal Minister of Education, described the implementation of a standard curriculum by all educational institutions as a revolutionary step. Today, students can succeed regardless of their family's financial situation. With the exception of Sindh, there are no issues with adopting the Unified National Curriculum anywhere. Shafqat Mehmood referred to the exceptions as "certain exceptions, close," which had been proposed by the Sindh government. To try to address their requests, "I have set a meeting with the provincial minister."

The Concept of Capacity Building

The term "capacity development" has gained popularity in discussions about global education reform in both developed and developing countries (Egbo, 2011). Capacity defined as "the capacity to comprehend or do something," while "building" is defined as "an increase in the amount of something through time." If people, organizations, and systems can carry out their tasks successfully, effectively, and sustainably, then they have capacity. Therefore, the process of enhancing an individual, group, organization, institution, or society's capability to accomplish its goals is referred to as capacity building.

- a) Perform essential duties, solve challenges, and set and attain goals,
- b) Understanding and addressing their development requirements in a wide and long-term manner (UNDP, 1998).

The focus of capacity building has evolved throughout time from institutions to people, individual training, institutional development, and more recently, complex systems theory, in which the capacities of individuals are tied to those of institutions and systems at large, according to UNESCO (2005). Recently, there has been a greater focus on the ongoing process of improving one's capacity to carry out basic tasks, address problems, set and achieve goals, and evaluate and attend to developmental needs (UNESCO, 2007). The achievement of educational goals and ensuring long-term development consequently require the development of educational ability.

Capacity Building of Primary Teachers

The growth of educational capacity is necessary for both the effective operation of the educational system and the capacity building of other economic sectors. A robust national education system is essential for the majority of other socioeconomic sectors to develop and boost their own capacity.

Building capacity has a big impact on the teachers' and students' performance in educational changes. Notwithstanding the fact that the first government secondary school was built in 1909, the issue of government direct involvement in the form of policy enunciation didn't come into official focus until 1905, when Nigeria's first department of education was established (Ukeje & Disiku, 1982). Instructors at Lagos' Kings College who have a range of preferences adjust (Drake & Sherin, 2006).

Instead of pledging loyalty to individual characteristics like gender, ethnicity, or professional experience, instructors pledged loyalty to the methods they believed to be best for their pupils. It was also discovered, per Datnow & Castellano (2000), that teachers preferred versatility. To meet the reading curriculum's learning objectives and help kids achieve learning outcomes more evenly, primary school teachers made adaptations depending on their pedagogical expertise (Maniates, 2010). Quinn & Kim (2017) claim that teachers, who have past experience ensuring curricular uniformity are better at making modifications.

All teachers, both seasoned and less experienced, made adaptations to meet the requirements of the curriculum and the needs of the pupils (Burkhauser & Lesaux, 2017). McCarthey & Woodard (2018) reported those 12 out of 20 teachers adjusted the writing curriculum to suit the needs of their pupils, four teachers ensured that the curriculum was followed, and four teachers just refused to utilize it. Less professional experience and development were gained by teachers who upheld curricular faithfulness, compared to more experienced teachers who made changes.

Using their prior experiences in the classroom and their natural tendencies towards certain curriculums, teachers modified the curriculum (Troyer, 2019). In response to student needs,

professional experience, personal characteristics, instructional time, and institutional and technical limitations, teachers adjusted their practices, according to Miller Day et al. (2013). Therefore, the instructional context, student, and instructor characteristics serve as the factors of curricular adaptation.

Setting consensus on science standards was the key issue that should have received attention, but when it came to science education programs, the need to equip future teachers with 21st century skills takes precedence (Suwono et al., 2017). Science and 21st century skills criteria overlap significantly, claims Schunn (2009). For example, the science of inquiry speaks about preparation, selecting the appropriate evidence, and communication abilities, which may promote system thinking and discourage ordinary problem-solving (Afandi et al., 2019; Schunn, 2009). Prospective science teachers can improve their scientific knowledge by participating in scientific processes (such as expressing opinions and arguments, experimenting and modelling, and presenting thorough data) in addition to gaining 21st century skills that will be useful when they enter the teaching profession (National Research Council, 2010; 2011). Setting standards for 21st-century skills among prospective scientific educators will result in the development of programs that are appropriate for the needs and problems of the twenty-first century.

The recently approved Single National Curriculum is regarded as a fantastic curriculum by the government. The most recent curriculum outlines new techniques for instructors to follow for teaching practices and examinations at the same time, notwithstanding the misgivings of certain educational professionals. Although the present opinion on education policy is more abstract overall than any completely constructed system, which is difficult to accept in practice if it has been given significant attention. The idea would have paved the way for higher-quality public education. Unfortunately, all of the effort has gone towards creating a comprehensive national curriculum.

This study seeks to explore the capacity building needs of teachers in District Dera Ghazi Khan, considering their crucial role in effectively implementing the single national curriculum at the primary level. The successful implementation of the single national curriculum relies on teachers' competence and their ability to effectively deliver the curriculum content. In comparison to other areas of the country, District Dera Ghazi Khan could have particular educational difficulties and discrepancies. To identify the areas that need to be strengthened in order to close any gaps and guarantee equal access to high-quality education, it will be helpful to understand the particular needs of the teachers in this district.

The findings of this study are helpful to researchers in the field of education, decision-makers in the field of education policy, and educators in general. They also provide guidance for the development of teachers' capacity to support students' learning. Also, it might contribute to the study of primary education. The results of this study can aid educators and policy makers in thinking of and putting into practice efficient educational strategies. Future curricular decisions can benefit from this study, according to curriculum developers.

The initial inspiration for the study came from two sources. I was interested in learning more about how the adoption of a Single National Curriculum in 2021 might affect teachers' job and how they might handle this influence because I work in education. The second aspect was a discussion I had with Primary teachers during the first year of the new curriculum's implementation, and their perception that curricular material had been "pushed up" through the academic years. I've been employed in the field of education for just over ten years, initially as a Science teacher and subject coordinator in primary schools. My primary area of interest has been primary level, and because of

this, I have had the fascinating and rare opportunity to interact with hundreds of teachers in a variety of school settings around my region. Although my primary focus has remained at the primary level, comments made to me by pertinent teachers also indicated that there may be an impact of these recent changes to the National Curriculum on the Primary school curriculum and Primary school teachers, an issue that I would also need to take into account in the research.

STATEMENT OF THE PROBLEM

This research study was conducted to investigate how the capacity of primary school teachers can be built in terms of the Single National Curriculum.

OBJECTIVES OF THE STUDY

The objectives of the study were:

1. To develop Teaching Module for capacity building of teachers toward science in terms of Single National Curriculum.
2. To implement the Teaching Module to assess the capacity building of teachers toward science in terms of Single National Curriculum.
3. To assess the capacity building of teachers toward science before and after the implementation of Teaching Module.

HYPOTHESIS

The investigation's primary question is: "How does the capacity of teachers build to teach science in terms of Single National Curriculum at Primary Level?" In order to respond to this inquiry, the following Hypothesis's were developed.

- H₀1. There is no significant difference between performance of teachers before and after the implementation of Teaching Module
- H₀2. There is no significant difference between the performance of teachers before and after teaching Classification of Living Organisms.
- H₀3. There is no significant difference between the performance of teachers before and after teaching Microorganisms.
- H₀4. There is no significant difference between the performance of teachers before and after teaching Flowers and Seeds.
- H₀5. There is no significant difference between the performance of teacher before and after teaching Environmental Pollution.
- H₀6. There is no significant difference between the performance of teacher before and after teaching Physical and Chemical Changes of Matters.
- H₀7. There is no significant difference between the performance of teacher before and after the implementation of intervention.

DESIGN OF THE STUDY

"Single National Curriculum: Capacity Building of Teachers at Primary Level" was the study's focus. This particular module was created for 5th grade science. For this subject, the researcher employed a quasi-experimental "pretest-posttest control group design." The "Teaching Module of Science for Class Five" was the study's primary resource.

Participants of the Study

This module was primarily created for public or government school teachers. The majority of the teaching strategies employed in government or public schools were dated and repetitive (reading and explanation methods). Implementing a science teaching module at the primary level was the main goal of this study. As a result, the participants were drawn from the middle school's primary section. Fifteen (15) female teachers from the Govt. Girls Middle School Churata No. 3, Tehsil, and District D.G. Khan were chosen for this study.

Group Selection Criteria

The researcher has a discussion session with the head teacher to select the sample for study. After the dissection, the sample for the study was selected. The following points were considered in selecting the sample of the study:

1. Discussion with the head teacher to select the population of study.
2. Those teachers were selected who have taught science for the last five years as per the time table.
3. Perspective teachers were also included in the study, who will teach 5th grade science in the coming year.

Tool Development

The 5th class science teaching module was the tool used for this investigation. The "Single National Curriculum and Textbook Board, Lahore" science textbook was used to build the module. The following steps of the tool's development are further tried to explain:

Module Development

The entire content of the science textbook was covered in the final module that the researcher built. All significant chapters, topics, activities, and exercises were included in the module. In four weeks, a researcher created a module (30 days). A.V. aids, the topic of the day, learning outcomes (objectives), rereading, and explanation of the lesson, two to three activities, an assessment, and homework were all included in each lesson.

Discussion with Experts

With subject-matter experts in science, the module's formation process was discussed. Experts were sought to build the Module. For the development, implementation, and evaluation of the module's efficacy, the researcher consulted with specialists. Expert guidance was used to create the pre- and post-tests.

Discussion with Supervisor

After talking with the specialists, the researcher talked to the related Supervisor about the development of the Module. Under the supervision of the supervisor, a module of four weeks' worth of activities was created and then approved for use with the research population.

Pilot Study

For a one-week pilot research, the module of Science was applied in girl's school. District D.G. Khan was home to the chosen primary schools. Following the recommendations of worried teachers, a few small changes were made to Module.

Reliability of the Tool

In order to evaluate the dependability of the data during pilot testing, the consistency of the correlation coefficients between variables were examined using the Cronbach alpha reliability

method. The correlation coefficient between variables and factors is calculated and the dependability of these factors is assessed in this manner. It was determined that Cronbach Alpha was .71, which is a genuine and credible result.

Procedure of the Study

This study is built on a primary level science teaching module, specifically for class 5. This module is entirely based on learning activities from the Single National Curriculum and textbook Board, Lahore, science textbook. This module covered all of the essential scientific textbook elements. The essential elements from the textbook, such as chapters, introductions, definitions, and explanations, were covered in the module. Every section of the science textbook was examined by the researchers. 30 days' worth of activities made up the module. Topic, Teaching Outcomes, Explanation, Activities, Assessment, and Homework were the elements of each day. The main goals of the module were to build the capacity of teachers to improve science teaching abilities and teach pupils through creative activities as opposed to the old traditional methods. On the basis of engaging and original exercises, researchers created a module of daily lessons. Through the use of these exercises, teachers' motivation in teaching increased and they actively teach science. In the school, the module was taught for four weeks. A 60-minute interval was allocated for teachers. Before implementing the curriculum, a pretest was given to the teachers to assess their prior knowledge. Incremental tests (topic wise and chapter wise) were administered following the module's application to gauge the efficiency of the module and the depth of the teacher's capacity building. After using these tests, weaknesses in teaching the module were identified, and the following day, attempts were made to eliminate the weaknesses.

Control Measures

Following control measures were used to minimize the threats to results.

1. For less interaction with other teachers, the researcher has used the last school working hour.
2. It was made sure that no teacher would be migrated or transferred to another school.
3. During the entire period, there were no accidental issues, such as death or accidents.

Pre-test

A pretest was administered to the chosen demographic to measure their prior knowledge and learning before the module was implemented on the teachers. For the demographic study, the teachers were chosen with the help of the head teacher, who had been teaching science for many years. The science textbook for fifth grade was used to create the pretest at random. The pretest had a maximum score of 30. Short, objective questions made up the test's structure.

Implementation of Module

After the pretest, the experimental group of teachers received the fifth-grade science teaching module for a period of four weeks. The researcher and the teachers both received copies of the module. Topic wise and chapter wise pretests and posttests were also held during this whole period.

Post-test

A post-test was conducted to see whether the module had been helpful for teachers after being used for four weeks. To check the results of the quasi experimental group, post tests were taken. The test was composed of brief, objective questions, and teachers were given 60 minutes to complete it.

Data Collection

The module for subject Science was made to build the capacity of teachers with advanced learning activities. 15 teachers were taken from school. Pretest was taken from the selected teachers. They were named as Qusai Experimental group. After that, these teachers of different post, qualification, subject and experience were allotted to implementation of teaching module for 30 days (4 weeks). This group was taught by researcher using developed module of Science. Specific time limitation was given to the group. For four weeks, these exercises continued. The module's basis was learner-centered instruction. A post-Module post-test was administered to the group. Both the quantity and type of questions were identical to the pretest. During four weeks teaching exercise, topic wise and chapter wise pretests and post-tests were also held by researcher. The pre-test was used to measure the teacher's prior knowledge, and the post-test was used to judge how much the instructor had learned, how valuable the module was, and how important the learning activities were to the scientific lesson. Both experiments were analyzed by the team's researcher. Results from the test were compared statistically.

DATA ANALYSIS

The study used paired sample t-test for data analysis. The quantitative data were presented in tables. The results were discussed in narrative form to draw inferences from what was presented. Appropriate statistical measures were applied at different stages of data collection, analysis and results.

RESULTS

Demographic Information of Teachers

Table 1

Demographic information about the participants of study

Sr.No.	Demographic Variables	Frequency	
1	Designation	SST	02
		EST	08
		PST	05
2	Gender	Female	15
3	Locality	Urban	15
4	Qualification	M.Phil.	01
		M.Sc.	06
		M.A.	03
		B.Sc.	01
		B.A.	04
5	Professional Qualification	M.Ed.	05
		B.Ed.	10
7	Experience	0-5years	0
		6-10Years	04
		11-15years	07
		16-20years	0
		21 and above	04

Table 1 shows descriptive statistics used to analyze participants demographic information.

1. Table shows that 02 SSTs 08 ESTs and 05 PSTs were selected for the study.
2. The table also displays that all participants were female.
3. Moreover, all were selected from urban area.
4. The respondents categorized their qualification as M.Phil, M.Sc, MA, B.Sc. and B.A.
5. Table shows descriptive statistics used to analyze participants demographic information. Furthermore 5 teachers categorized their highest professional qualification as M.Ed. 10 respondents categorized their academic qualification as B.Ed.
6. Similarly, teachers were selected their teaching experience between 5 to 24 years.

Comparison between Chapter wise Pretest and Post Test Scores

This section presents chapter wise analysis of test's data.

Table 2
Pretest and posttest marks comparison of chapter 1

Variables	Category	N	Mean	SD	df	t	Sig.
Classification1	Pretest	15	14.6667	1.54303	14	-	.000
Classification2	Post test	15	18.2667	1.16292		9.589	

Table 2 highlights the differences between the chapter 1 pretest and posttest scores. It shows that there was only one group with a total of 15 participants. One chapter's pretest and posttest are listed in this table. The difference between the Mean values was discovered to be 3.6000. The standard deviation values were found to differ by .38011. Table 2 also deduced that there was a statistically significant difference between the pretest and posttest in the development of teachers' capacity at the primary level because the estimated significance value was 0.000, which was less than the tabulated significance level of 0.05. As a result, the study's hypothesis—according to which there would be no discernible difference between teachers' performance before and after a teaching classification was found to be untrue.

Table 3

Pretest and posttest marks comparison of chapter 2

Variables	Category	N	Mean	SD	df	t	Sig.
Microorganisms 1	Pretest	1	15.333	1.8771	1	10.98	0.00
		5	3	8			
Microorganisms 2	Post test	1	18.666	0.9759	4	6	0
		5	7	0			

Table 3 highlights the differences between the chapter 2 pretest and posttest scores; it also shows that there was only one group with 15 participants. This table lists the pretest and posttest results for one chapter. The difference between the Mean values was discovered to be 3.3334. The difference between the standard deviation values was calculated to be 0.90128. In addition, Table 4.4.2 deduced that the computed significance value was 0.000, less than the tabulated significance level of 0.05, indicating that there is statistically significant difference between the pretest and posttest in the development of teachers' capacity at the primary level. In this study, the null hypothesis was rejected since it was proven to be untrue that there is no discernible difference between teachers' performance before and after teaching microorganisms.

Table 4***Pretest and posttest marks comparison of chapter3***

Variables	Category	N	Mean	SD	df	t	Sig.
Flowers1	Pretest	15	15.3333	1.87718	14	-	.000
Flowers2	Post test	15	18.0000	1.64751		6.501	

Table 4 explains the pretest and post-test marks difference of chapter 3; the table 4 indicates that there was one group having 15 participants. This table has one chapter's pretest and posttest. The difference in the values of Mean was found as 2.6667. The difference in the values of Std. deviation was found as 0.22967. Table 4.4.3 also inferred that the calculated significance value was 0.000, less than tabulated significance level 0.05, which indicates that there is statistical significant difference between pretest and posttest in capacity building of teachers at primary level. The hypothesis that there is no significant difference between the performance of teachers before and after teaching module chapter 3 was found false, so the null hypothesis is rejected in this case of this study.

Table 5***Pretest and posttest marks comparison of chapter 4***

Variables	Category	N	Mean	SD	df	t	Sig.
Enviornment1	Pretest	15	14.8667	1.64172	14	14.466	0.000
Enviornment2	Post test	15	18.2667	1.22280			

The disparity between the pretest and posttest scores for chapter 4 is explained in table 5, which also shows that there was only one group with 15 participants. One chapter's pretest and posttest are listed in this table. The difference between the Mean values was discovered to be 3.4.000. The standard deviation values were found to different by .41892. Table 4.4.4 also deduced that there was a statistically significant difference between the pretest and posttest in the development of teachers' capacity at the primary level because the estimated significance value was 0.000, which was less than the tabulated significance level of 0.05. The null hypothesis was rejected in this study since it was discovered that there is no discernible difference between teachers' performance before and after the chapter 4 module.

Table 6***Pretest and posttest marks comparison of chapter 5***

Variables	Category	N	Mean	SD	df	t	Sig.
Matters1	Pretest	15	15.2667	1.79151	14	-	0.000
Matters2	Post test	15	18.4000	1.18322		8.622	

Table 6 explains the pretest and post-test marks difference of chapter 5; the table 6 indicates that there was one group having 15 participants. This table has one chapter's pretest and posttest. The difference in the values of Mean was found as 3.1333. The difference in the values of Std. deviation was found as 0.60829. Table 6 also inferred that the calculated significance value was 0.000, less than tabulated significance level 0.05, which indicates that there is statistical significant difference between pretest and posttest in capacity building of teachers at primary level. The hypothesis that there is no significant difference between the performance of teachers before and after teaching module was found false, so the null hypothesis is rejected in this case of this study.

DISCUSSION

The majority of teachers recognized it as a fantastic learning strategy, according to research findings of the Single National Curriculum. This study is important because it evaluates how primary school teachers are developing their capacities in relation to the single national curriculum. Curriculum literacy is a crucial ability that instructors and aspiring instructors should have (Erdem & Emir, 2018). According to Chukwu (2009), capacity building refers to the knowledge and abilities that organizations require in order to engage fully in the labor market.

According to Abbas et al. (2022), the importance of SNC and its benefits and drawbacks at the school level are investigated in this descriptive study. When the PTI-led ex-government came into office in 2018, they made a number of promises regarding educational reforms that would boost performance in Pakistani schools and close the achievement gap between private and public educational institutions. Also, it was believed to construct a modernized "universal education system" and lessen the fragmentation and disparities of Pakistan's educational system.

An indigenous model of teacher education in Pakistan has been proposed, encompassing key elements of teacher education related to admission standards, curriculum, training for teacher education, uniform teacher recruitment practices, and implementing accreditation and licensing generally. While teacher education is at the heart of all educational reforms, Pervaiz (2022) stated that this study may potentially inform evidence-based and data-led policy creation.

The Single National Curriculum (SNC) is a proposed educational program in Pakistan that attempts to synchronize the subject matter, instructional strategies, and evaluation procedures in all public and private schools nationwide. The development of teachers' capacities at the primary level is one of the main tenets of this approach. The significance of increasing teacher capacity will be examined, along with its advantages, difficulties, and practical application.

The successful implementation of the Single National Curriculum depends on primary school teachers' capacity improvement. Young children's minds are greatly influenced by their teachers, and the abilities and skills of teachers can have a long-lasting effect on the learning outcomes of students. As a result, it is crucial that they possess the information, abilities, and attitudes needed to deliver high-quality instruction.

One of the key advantages of teacher capacity building is that it promotes teachers' professional growth. Teachers can develop new skills and knowledge that will improve their teaching strategies and the learning results for their students through training programs and seminars. Also, teachers who participate in capacity building tend to be more motivated and invested in their careers, which can have a good effect on student engagement and performance.

However, there are also several challenges associated with teacher capacity building. One of the main challenges is the lack of resources, including time and funding, to provide training and professional development opportunities. Additionally, there may be resistance to change from some teachers who may feel that they are already adequately equipped to teach and may be resistant to adopting new teaching methods or approaches.

To address these challenges, it is important to ensure that teacher capacity building programs are well-designed and implemented effectively. This can be achieved through collaboration between policymakers, educational experts, and teachers themselves. Training programs should be tailored to meet the specific needs of teachers and be focused on the most critical areas of improvement. It is also essential to ensure that adequate resources are allocated to support training programs, and that teachers are incentivized to participate.

CONCLUSION

The study's findings led to the following conclusions, which were made:

H₀1: There is no significant difference between performance of teachers before and after the implementation of Teaching Module

Results showed that there was significant difference between the pretest and posttest in the development of teachers' capacity at the primary level. Therefore H₀1 was not accepted.

H₀2: There is no significant difference between the performance of teachers before and after teaching Classification of Living Organisms.

Results presented that there was a significant difference between the pretest and posttest in the development of teachers' capacity at the primary level Therefore H₀2 was not accepted.

H₀3: There is no significant difference between the performance of teachers before and after teaching Microorganisms.

Results depicted that there was a significant difference between the pretest and posttest in the development of teachers' capacity at the primary level. Therefore H₀3 was not accepted.

H₀4: There is no significant difference between the performance of teachers before and after teaching Flowers and Seeds.

Results demonstrated that there was there was a significant difference between the pretest and posttest in the development of teachers' capacity at the primary level. Therefore H₀4 was not accepted.

H₀5: There is no significant difference between the performance of teacher before and after teaching Environmental Pollution.

Results demonstrated that there was there was a significant difference between the pretest and posttest in the development of teachers' capacity at the primary level teaching Environmental Pollution. Therefore H₀5 was not accepted.

H₀6: There is no significant difference between the performance of teacher before and after teaching Physical and Chemical Changes of Matters.

Results demonstrated that there was there was a significant difference between the pretest and posttest in the development of teachers' capacity in teaching Physical and Chemical Changes of Matters at the primary level. Therefore H₀6 was not accepted.

H₀7: There is no significant difference between the performance of teacher before and after the implementation of intervention.

Results demonstrated that there was there was a significant difference between the pretest and posttest in the development of teachers' capacity at the primary level. Therefore H₀7 was not accepted.

It may be concluded that developed module was effective for the capacity building of teachers in teaching single national curriculum of Science at primary level.

RECOMMENDATIONS

After summarizing the study, findings and conclusion, researcher provides some recommendations as follows:

1. The government should invest in the capacity building of teachers by providing training programs that are specifically designed to equip them with the skills, knowledge, and resources needed to deliver the new curriculum. The training programs should be regular, ongoing, and updated as the curriculum evolves.
2. The government should provide teachers with adequate resources such as teaching aids, textbooks, and digital learning tools to help them deliver the curriculum effectively.
3. Use computers, iPads, and the internet can greatly improve the standard of teaching and learning. To help teachers properly use technology, the government ought to make investments in the required infrastructure.
4. The government should continuously evaluate the effectiveness of the curriculum and make improvements based on feedback from teachers, students, and other stakeholders. This will help to ensure that the curriculum is relevant, up-to-date, and meets the needs of students.
5. It is essential to involve all stakeholders in the implementation of a single national curriculum. This includes parents, teachers, students and education experts. Their input can be used to improve the curriculum and ensure that it meets the needs of all students.
6. The government should provide ongoing support to teachers to ensure that they are motivated, engaged, and effective. This can include mentoring, coaching, and other forms of professional development.
7. The government should create a culture of accountability by setting clear standards, monitoring progress, and taking action to address any issues that arise. This will help to ensure that the curriculum is delivered effectively and that students receive a high-quality education.

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