International Journal of Contemporary Issues in Social Sciences
Volume 3, Issue 2, 2024 ISSN(P):2959-3808 | 2959-2461

DIFFICULTIES FACED BY PUBLIC SECTOR TEACHERS TO PRACTICE SINGLE NATIONAL CURRICULUM: A CASE OF 8TH-GRADE MATHEMATICS

Kiran Iqbal[1], Saima Nasreen[2], Sajid Hasan[3]

Received: 28 February, 2024 **Revised:** 29 March, 2024 **Accepted:** 08 April, 2024 **Published:** 22 April, 2024

ABSTRACT

The study examined the challenge public school teachers face in implementing the Single National Curriculum (SNC) for 8th-grade mathematics in Pakistan. The study holds significance in providing insights into the challenges faced by public school teachers in implementing the SNC and has practical implications for educational policy and teacher training in Pakistan. A quantitative approach was employed, using a questionnaire with closed-ended questions to gather data from 100 teachers. The findings revealed that teachers struggle with comprehending math content, teaching new concepts, and locating relevant resources. Additionally, teachers feel inadequately trained to teach the new syllabus and encounter difficulties in connecting new concepts to real-life examples. Lack of student interest in new mathematical concepts was also identified as a significant challenge. The study's outcomes provide valuable insights into the obstacles faced by teachers in implementing the SNC, emphasizing the need for comprehensive support and training to address these challenges effectively. The study's findings can be utilized to assess the obstacles teachers face and enhance the SNC implementation.

Keywords: Single National Curriculum, public sector teacher, 8th grade Mathematics book

1. INTRODUCTION

Pakistan is not a developed country and has faced a lot of challenges from the beginning and the main challenge is related to the educational system. The prosperity and development of a country depend on the excellence of that country's educational system. Lowering the educational standards of any country will have a drastic effect on the country's advancement and the country will never be able to meet the rapid advancement of the modern world. Education plays a vital role in nation-building. planning, policy-making, educational standards, curriculum and syllabus are different educational functions that play an important role in national unity and preserve the ideological foundation of the state. Pakistan has three types of educational institutions: Public, private, and madrassas. For the improvement of the educational system of Pakistan new reforms for curriculum are introduced.

According to Barnes (2018), at any school or college, a planned sequence of syllabuses that makes the course of study is called a curriculum. Mr Imran Khan, the Prime Minister of Pakistan, launched the Single National Curriculum (SNC) to bring all youngsters of the country under one curriculum. Single National Curriculum (SNC) is used to bridge the gap and difference between all types of educational institutions such as the public and private sectors. A Single national curriculum also comprises many new and updated concepts which are according to international standards. It promotes the concept of universal education. It has been made compulsory for every provincial government to implement a single national curriculum in educational institutions. This decision was taken to make sure that every student gets high-quality and equal education irrespective of public and private schools or class differences (Tayyab, Umer, & Sajid, 2022).

For now, SNC has been implemented up to phase II and phase III still needs implementation. As Pakistan is a developing country, there are many hurdles in the process of proper implementation of SNC. Especially in the public sector, there are not enough, relevant and updated resources to teach mathematics. Teachers face a lot of difficulties in teaching new concepts of math due to the lack of training. In the new syllabus few concepts are very difficult for senior teachers to understand and teach to the students. On the other hand, this is not the case for

recently appointed teachers as they are aware of such concepts. There are many other difficulties and challenges faced by public sector teachers in teaching mathematics.

1.1. Research Objectives

The overall objectives of the study are as follows:

1. To assess the respondents' understanding of eighth-grade math (SNC).
2. To investigate the challenges faced by public teachers in implementing a Single National Curriculum (SNC) for 8th-grade mathematics.
3. To discover if teachers are adequately trained to teach math's to 8th-grade students in public schools.

1.2. Research Questions

1. To what extent do teachers understand the key concepts of the 8th-grade mathematics curriculum under the Single National Curriculum?
2. Whether professional development and training opportunities provided to public sector teachers to enhance their capacity in teaching 8th-grade mathematics under the Single National Curriculum?
3. What are the primary challenges faced by public sector teachers when implementing the 8th-grade mathematics curriculum outlined in the Single National Curriculum?

1.3. Significance of the Study

The study is important because it sheds light on the difficulties public school teachers encounter when putting the Single National Curriculum (SNC) for math in the eighth grade into practice. The Department of Education can use the results to examine the difficulties instructors encounter when instructing students in the SNC for mathematics. The study's findings can also add to the body of knowledge used by future researchers, conferences, and discussions on the application of the National Curriculum. The study addresses teachers' experiences implementing curricula and the challenges they encounter, theoretically improving their understanding of the SNC. The study advances academic understanding of the National Curriculum's implementation. As a result, Pakistan's teacher preparation programs and educational policies will be affected by the study's conclusions.

2. Literature Review

The last twenty years have seen tremendous advances in the field of curricular modification, along with several possible problems and context-specific difficulties. It appears that two ideas are essential to implementing curriculum change. Recognizing the circumstances in which curriculum changes will be implemented is the first step. The other entails giving individuals enough assistance and support to implement change into practice. Teacher capacity building and curriculum reform are inextricably linked. Teachers' agency to apply the change is affected by the ecological conditions or social settings (including culture, structure, and resources) in which they operate, as well as how empowered they feel to evaluate and enhance their methods and practices (Butt & Shahzad, 2019). When examining Pakistan's problems as a growing country, the focus invariably shifts to its fundamental components, specifically its educational system. Pakistan's educational system displays a division resulting from its past association with British colonization in the Indo-Pak region. The way this divide is expressed is through different forms of education: Deni Madaris, English-medium schools, and Urdu-medium schools. This creates a gap between the country's student population and the overall population (Kausar, 2020). The role of teachers and instructors acting as implementers is very important (Ahmed, Muhammad, & Anis, 2020). Unfortunately, their involvement in the SNC's development and assessment procedures has been minimal, resulting in curricula that are out of date. This lack of involvement leads to a lack of knowledge, which in turn impacts the effectiveness of the teaching-learning process as well as teacher performance. Pakistan has a deficit in comparison to wealthy nations where educators actively participate in curriculum design. There is a clear discrepancy between the suggestions made by the education staff and the judgments made about policy. Abbas, Basit, and Akhtar (2021) state that the primary school implementation of a consistent SNC in Pakistan is affected by several serious challenges in the education system. Public schools find it difficult to provide high-quality education, and religious institutions encounter difficulties with regulations. The problems are made worse by basic infrastructure shortcomings, high dropout rates, poorly qualified teachers, and differences in educational backgrounds. The perceived rigidity of the SNC is

one of its main drawbacks. This rigidity may undermine teacher autonomy and limit the creative design of curricula, thus weakening professional judgment and independence (Lipman, 2017). Effective curriculum delivery is further hampered by educators' inadequate training and the delayed availability of SNC-related resources (Zaman, Saleem & Ali, 2021). Workshops and national conferences on SNC implementation were found to be poorly organized, with provincial educators' perspectives not fully incorporated (Bashir, Yasmin, & Ahmad, 2021). To guarantee accurate SNC implementation, a strong monitoring system is necessary, given the variations in implementation readiness among schools in different provinces. All things considered, Pakistan's road toward a unified educational system via a Single National Curriculum is fraught with intricate details and numerous obstacles. It takes a coordinated and flexible effort to address pedagogical and infrastructure realities while maintaining educational equity and national unity.

As per Bari (2021), the National Curriculum Council (NCC), which is a government body in Pakistan, holds the responsibility of implementing modifications to the educational syllabus. This manifesto has been the main source of inspiration for the recent curriculum revisions, which the PTI government has named the "Single National Curriculum." The idea of a Single National Curriculum to end class conflicts in education, such as secular versus religious and private versus public disagreements, was first raised in the manifesto of the PTI government. The current curricular changes have been primarily inspired by this manifesto as well. They thought it would have positive social and economic effects on all parties. Since then, though, there has been opposition to the idea of a single national curriculum due to general doubts about the validity of a curriculum created by a single institution. Its implementation has become extremely challenging as a result (Mustafa et al., 2022). Regarding every aspect that goes into providing a high-quality education, public schools have a poor reputation. The primary problem stems from the staff's and instructors' lack of involvement and supervision. However, compared to public schools, private schools make greater investments and offer a higher quality of education. Conversely, Madaris concentrates only on religious education. In light of everything mentioned above, it is reasonable to conclude that Pakistan's educational system is fragmented and uneven (Panjwani & Chaudhary, 2022).

Pakistan has long struggled to establish a national identity. Since its establishment in 1947, it has prioritized the creation of a national identity, which is currently represented in the educational policies and curricula of the nation. In Pakistan, the focus on creating an identity via public education has turned learning into a tool for nation-building at the expense of civic imagination, diversity, empathy, and peaceful coexistence. The Pakistan Tehrik-i-Insaf (PTI) party, led by Prime Minister Imran Khan, has long advocated for education-based uniformity, and this goal is central to their proposed "Single National Curriculum" (Tahir, 2022).

3. Methodology

This study was intended to examine the challenges encountered by public sector teachers in Pakistan while implementing the Single National Curriculum (SNC) for 8th-grade mathematics. The research employs a quantitative approach, employing a questionnaire to gather data. The findings reveal that teachers struggle with comprehending math content, teaching new concepts, and locating relevant resources. Additionally, the study highlights that teachers feel inadequately trained to teach the new syllabus and encounter difficulties in connecting new concepts to real-life examples. The study's outcomes can be utilized to assess the obstacles teachers face and enhance the SNC implementation.

To gather information about the difficulties faced when teaching the Single National Curriculum of mathematics in the public sector, as well as suggestions for overcoming these obstacles, a quantitative study was done, the study used a questionnaire with closed-ended questions. The survey consisted of fifteen closed-ended questions with a 5-point Likert scale. The collected data was tabulated, and the SPSS program was used for analysis. The collected data was examined closely to answer the research question.

Population

All teachers of mathematics teaching in the public sector in Sargodha were the population.

Sample:

A hundred teachers were taken as the sample from different public sector schools in Sargodha.

4. Results

4.1. Frequencies

Statistics

		Age	Gender	Qualification
N	Valid	100	100	98
	Missing	0	0	2
Mean			1.130	1.847
Median			1.000	1.000
Mode			1.0	1.0
Percentiles	25		1.000	1.000
	50		1.000	1.000
	75		1.000	3.000

The table presents statistics for three variables: Age, Gender, and Qualification, based on a sample of 100 observations. Age and Qualification exhibit similar distributions, with most values clustered around 1. Gender's numerical representation may require clarification, as it's typically categorical.

Table 1: Frequency Table

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	2.0	2.0	2.0
	21	1	1.0	1.0	3.0
	22	4	4.0	4.0	7.0
	23	14	14.0	14.0	21.0
	23years	1	1.0	1.0	22.0
	24	17	17.0	17.0	39.0
	25	17	17.0	17.0	56.0
	26	16	16.0	16.0	72.0
	27	4	4.0	4.0	76.0
	28	3	3.0	3.0	79.0
	29	3	3.0	3.0	82.0
	30	3	3.0	3.0	85.0
	31	1	1.0	1.0	86.0
	33	2	2.0	2.0	88.0
	35	1	1.0	1.0	89.0
	37	1	1.0	1.0	90.0
	38	1	1.0	1.0	91.0
	40	1	1.0	1.0	92.0
	43	1	1.0	1.0	93.0
	44	1	1.0	1.0	94.0
	46	2	2.0	2.0	96.0
	50	2	2.0	2.0	98.0
	52	1	1.0	1.0	99.0
	53	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

This table displays the distribution of ages in the sample, showing frequencies, percentages, valid percentages, and cumulative percentages. The majority of respondents are in their mid-20s to early 30s, with ages ranging from 21 to 53. However, there are some discrepancies in the data, such as the presence of "23 years" as an age category, which might need clarification or correction. Overall, the distribution suggests a relatively diverse age range among respondents.

Table 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	87	87.0	87.0	87.0
	2.0	13	13.0	13.0	100.0
	Total	100	100.0	100.0	

This table represents the distribution of a variable with two categories: 1.0 and 2.0. The majority of observations fall into category 1.0, accounting for 87% of the total, while category 2.0 constitutes the remaining 13%. The cumulative percentage indicates that all observations are accounted for, totaling 100%.

Table 3

Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	55	55.0	56.1	56.1
	2.0	13	13.0	13.3	69.4
	3.0	20	20.0	20.4	89.8
	4.0	10	10.0	10.2	100.0
	Total	98	98.0	100.0	
Missing	System	2	2.0		
Total		100	100.0		

Table 1, table 2, and table 3 show the frequency and percentage of responses of participants concerning their age, gender and qualification.

4.2. Descriptive statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
4. I think SNC is easy to teach for recently appointed teachers.	100	4.0	1.0	5.0	1.970	.8928
Gender	100	1.0	1.0	2.0	1.130	.3380
Qualification	98	3.0	1.0	4.0	1.847	1.0779
1. I face difficulty in grasping the math content of 8th grade.	100	4.0	1.0	5.0	3.120	1.1126
2. I feel I am not proficient enough to teach new concepts of math.	100	4.0	1.0	5.0	3.230	1.1794
3. I think SNC is easy to teach for senior teachers.	100	4.0	1.0	5.0	3.020	1.1369
5. I face difficulty in solving 6-digit numbers.	100	4.0	1.0	5.0	3.400	1.0541
6. I face difficulty in teaching new concepts of irrational numbers.	100	4.0	1.0	5.0	3.350	1.1580
7. I face difficulty in teaching the concept of congruent triangles.	99	4.0	1.0	5.0	3.030	1.3360
8. I find it difficult to teach enlargement and rotation of figures.	100	4.0	1.0	5.0	3.060	1.2045
9. I face difficulty in teaching experimental and theoretical probability to students in 8th grade.	99	4.0	1.0	5.0	3.081	1.1577
10. I feel teachers are inadequately trained to teach new syllabi of mathematics.	100	4.0	1.0	5.0	2.000	.8409
11. I feel there is a lack of updated and relevant resources to teach new concepts of mathematics.	100	4.0	1.0	5.0	1.860	.9430
12. I think teaching mathematics (SNC) in the public sector is challenging.	100	4.0	1.0	5.0	2.380	.9825

13. I face trouble in clearing new and difficult concepts of mathematics in a given time.	99	4.0	1.0	5.0	2.727	1.1049
14. The lack of student interest in new concepts of mathematics makes it challenging to teach effectively.	100	3.0	1.0	4.0	2.380	.8965
15. I feel difficulty in relating new concepts of mathematics with daily life examples.	100	4.0	1.0	5.0	3.170	1.3108

5. Discussion

The study used a quantitative approach to gather information about the challenges public school teachers face in implementing the Single National Curriculum (SNC) for 8th-grade mathematics. The survey consisted of fifteen closed-ended questions with a 5-point Likert scale. The data collected was tabulated and analyzed using the SPSS program. The findings revealed various challenges faced by teachers in teaching the new curriculum, including difficulty in teaching new concepts, lack of updated resources, inadequately trained teachers, and difficulty in relating new concepts to daily life examples.

Table 5 summarizes teachers' perspectives on challenges encountered during the application of SNC. The table comprises responses from 100 participants, detailing mean values and standard deviations (S.D.) for each statement. According to the table faced difficulty in grasping the math content of 8th grade, we got the following descriptive statistics: Mean (average) value = 3.120 and Standard Deviation (SD) value = 1.1126. The mean value of 3.120 suggests that, on average, respondents tend to be neutral or slightly agree that they face difficulty in grasping the math content of 8th grade. The standard deviation (SD) of 1.1126 indicates the spread or variability of the responses around the mean. The average response indicates a moderate level of agreement that respondents face difficulty in grasping the math content of 8th grade. However, the relatively high standard deviation suggests that individual responses vary, and there is not a strong consensus among respondents. The survey results suggest that, on average, teachers have a somewhat neutral stance regarding their proficiency in teaching new math concepts (mean = 3.230). However, the moderate standard deviation (1.1794) indicates a fair amount of variability in opinions. More teachers agreed they face difficulty in teaching new concepts of mathematics but there is no strong consensus. On average, respondents tend to agree that SNC is easy to teach for senior teachers (mean of 3.020). However, there is a moderate amount of variability in responses (standard deviation of 1.1369), indicating that there is some diversity in opinions among the respondents. Some feel more strongly about this statement than others as many agree that it is difficult for senior teachers to teach a single national curriculum of mathematics. The mean value of 1.970 suggests that, on average, respondents tend to agree that a Single national curriculum of mathematics (SNC) is easy to teach for recently appointed teachers. The standard deviation of 0.8928 measures the variability or spread of the responses around the mean. A lower standard deviation indicates that responses are relatively close to the mean, suggesting a more consistent agreement among respondents. The mean value of 3.400 indicates a moderate tendency towards disagreement with the statement. The standard deviation of 1.0541 is relatively low. On average, respondents moderately disagree with facing difficulty in solving 6-digit numbers. The responses are relatively consistent, with a low level of variability among the respondents. The mean response of 3.350 indicates a moderate tendency towards neutrality regarding the difficulty in teaching new concepts of irrational numbers among the 100 respondents. The relatively low standard deviation of 1.1580 suggests that responses are relatively consistent, with a moderate level of agreement or disagreement among

respondents. On average, teachers in the sample do not strongly agree that they face difficulty teaching the concept of congruent triangles, as indicated by the mean slightly above the midpoint. However, the moderate standard deviation suggests that there is variability in responses, with some teachers expressing higher levels of difficulty while others find it less challenging. The mean value is slightly above the midpoint of the scale (2.5), which indicates that, on average, respondents find it moderately difficult to teach enlargement and rotation of figures. The standard deviation of 1.2045 indicates the extent of variability in the responses, indicating that some respondents find it more difficult or less difficult than the average. A mean of 3.081 suggests that, on average, respondents are leaning toward agreement that they face difficulty in teaching experimental and theoretical probability to 8th-grade students. A standard deviation of 1.1577 suggests there is a moderate amount of variability in responses, suggesting that some teachers feel more strongly about the difficulty than others. On average, respondents tend to agree (mean = 2.000) that teachers are inadequately trained to teach the new mathematics syllabus. The low standard deviation (0.8409) indicates a high level of agreement among respondents, suggesting a consistent perception among participants regarding the perceived inadequacy of teacher training. A mean value of 1.860 suggests that, on average, respondents tend to agree or strongly agree that there is a lack of updated and relevant resources to teach new concepts of mathematics. A standard deviation of 0.9430 indicates that the responses are relatively close to the mean, suggesting a moderate level of agreement among respondents. There is some variability in opinions, but it is not highly dispersed. The mean value of 2.380 suggests that, on average, respondents tend to lean towards agreeing that teaching mathematics using the Student-Centered Learning (SNC) approach in public sectors is challenging. The standard deviation of 0.9825 provides a measure of the variability or spread of the responses around the mean. A higher standard deviation indicates more variability in responses, suggesting that there is a notable diversity of opinions among the respondents. Some may strongly agree, while others may strongly disagree. The mean of 2.727 suggests a tendency toward agreement that teachers face trouble in clearing new and difficult concepts of mathematics in a given time, but the moderate standard deviation of 1.1049 indicates that there is some diversity in responses. The mean is below the mid-point of the scale (2.5), suggesting that, on average, respondents tend to agree (though not strongly) that the lack of student interest in new mathematical concepts poses a challenge. The standard deviation is relatively moderate. It indicates some variability in responses, suggesting that there is a degree of diversity in opinions among the respondents. The mean of 3.170 suggests that, on average, respondents have a tendency to disagree (leaning towards agreement) with the statement about feeling difficulty in relating new mathematical concepts to daily life examples. However, the moderate standard deviation (1.3108) indicates that there is some variability in individual responses and that not everyone shares the same level of agreement or disagreement. Some respondents may strongly agree or disagree, while others may fall in between.

The study conducted a quantitative approach to understand the challenges public school teachers face in implementing the Single National Curriculum (SNC) for 8th-grade mathematics. The findings revealed that teachers struggle with comprehending math content, teaching new concepts, and locating relevant resources. Additionally, the study highlighted that teachers feel inadequately trained to teach the new syllabus and encounter difficulties in connecting new concepts to real-life examples. The lack of student interest in new concepts of mathematics was also identified as a significant challenge. The challenges identified in the study align with the broader issues in the Pakistani educational system. The implementation of the SNC faces obstacles due to the fragmented nature of the educational system, with disparities between public and private schools, as well as religious institutions. The lack of updated and relevant resources, inadequately trained teachers, and difficulties in curriculum delivery have been identified as significant challenges in the implementation of the SNC. The Study's outcomes provide valuable insights into the obstacles faced by teachers in implementing the SNC for 8th-grade mathematics. The challenges are multifaceted, including difficulties in teaching new concepts, lack of updated resources, inadequately trained teachers, and trouble in relating new concepts to daily life examples. These findings underscore the need for comprehensive support and training for teachers to implement the new curriculum effectively. The study's findings can

be utilized to assess the obstacles faced by teachers and enhance the implementation of the SNC. It is recommended that the Department of Education in Pakistan use the results to review the challenges faced by teachers in teaching the SNC for mathematics. Additionally, there is a need for teacher capacity building and comprehensive support to address the challenges identified, including providing updated resources, enhancing teacher training, and facilitating the connection of new concepts to real-life examples. Overall, the study sheds light on the challenges faced by public school teachers in implementing the SNC for 8th-grade mathematics, emphasizing the need for targeted support and training to address these challenges effectively.

6. Conclusion

The study provides valuable insights into the challenges encountered by public sector teachers in Pakistan when implementing the Single National Curriculum (SNC) for 8th-grade mathematics. The quantitative approach, using a questionnaire to gather data, revealed that teachers face difficulties in comprehending math content, teaching new concepts, and accessing relevant resources. Additionally, the study highlighted that teachers feel inadequately trained to teach the new syllabus and encounter challenges in connecting new concepts to real-life examples. The variability in opinions among participants regarding the teaching and learning of certain math concepts indicates the complexity of the challenges faced by teachers.

These findings underscore the need for comprehensive support and training for teachers to effectively implement the new curriculum this study can be utilized to assess the obstacles faced by teachers and to enhance the implementation of the SNC. By addressing these challenges, the educational system in Pakistan can work towards improving the quality of mathematics education in public schools. Further research and interventions are recommended to address the identified challenges and support teachers in effectively implementing the SNC for 8th-grade mathematics.

Recommendations

Based on the findings and methodology of the study, several recommendations for further research can be proposed:

1. **Longitudinal Study**: Conduct a longitudinal study to track the challenges faced by public sector teachers in implementing the Single National Curriculum (SNC) for 8th-grade mathematics over an extended period. This would provide insights into how these challenges evolve and whether interventions have a lasting impact.
2. **Qualitative Approach:** Complement the quantitative approach with a qualitative study to gain a deeper understanding of the specific difficulties teachers encounter in comprehending math content, teaching new concepts, and connecting them to real-life examples. Qualitative data can provide rich insights into the experiences and perspectives of teachers.
3. **Comparative Analysis:** Compare the challenges faced by public sector teachers with those in private schools or other educational systems. This comparative analysis could reveal differences in the implementation of the SNC and highlight specific challenges unique to public sector teachers.
4. **Intervention Studies:** Design and implement interventions aimed at addressing the identified challenges, such as targeted training programs, resource provision, or curriculum design changes. Evaluate the effectiveness of these interventions in supporting teachers in implementing the SNC.
5. **Student Perspectives:** Explore the perspectives of students regarding the new mathematics curriculum. Understanding how students perceive the new concepts and teaching methods can provide valuable insights into the challenges faced by teachers and the effectiveness of the curriculum implementation.

By addressing these recommendations for further study, researchers can contribute to a more comprehensive understanding of the challenges and potential solutions for implementing the SNC for 8th-grade mathematics in public sector schools in Pakistan.

Reference

Ahmed, F., Muhammad, Y., & Anis, F. (2020). Developing secondary school teachers' positive attitude towards reflective teaching: A collaborative action research study. *sjesr*, *3*(4), 43-53. https://ue.edu.pk/jrre/articles/Article14-2-7.pdf

Abbas, A., Basit, I., Akhtar, M., Mehmood, U., & Nazim, F. (2022). SINGLE NATIONAL CURRICULUM AT SCHOOL LEVEL IN PAKISTAN: EXPECTED CHALLENGES, MERITS AND DEMERITS. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *19*(3), 48-65. https://archives.palarch.nl/index.php/jae/article/view/11167

Tahir, I. (2022). Decolonizing Madrassa Reform in Pakistan. *Current Issues in Comparative Education*, *24*(1). https://journals.library.columbia.edu/index.php/cice/article/view/8853

Irfan, H. (2021). *Insightful perspectives about effective implementation of ESL single National curriculum (SNC) in Pakistani schools*. Pakistan Social Sciences Review 5 (I) pp 975-986. https://pssr.org.pk/issues/v5/1/insightful-perspectives-about-effective-implementation-of-esl-single-national-curriculum-snc-in-pakistani-schools.pdf

Alli, S. S. (2021). Perception of major stakeholders of secondary schools on life skills education. Scholarly Research. Journal for Humanity Sciences and English Language, 9, 46 https://doi.org/10.21922/srjhsel.v9i46.1545

Khan, M. R., & Nadeem, H. A. (2020). Do The Textbooks Reflect the Curriculum? A Comparative Analysis of Social Studies Textbooks Taught in Public and Private Sector in Pakistan. https://www.preprints.org/manuscript/202007.0704

Single National Curriculum (2020). Single National Curriculum for Classes Pre I-V Government of Pakistan, Ministry of Federal Education and Training (Curriculum Wing) Islamabad. Retrieved from: (www.mofept.gov.pk)

Tayyab, M., Umer, S., & Sajid, A. (2022). Decoding religious contents of grade 5th textbooks of Single National Curriculum (SNC) in Pakistan. *Pakistan Journal of Humanities and Social Sciences*, *10*(1), 291-297. https://internationalrasd.org/journals/index.php/pjhss/article/view/640

Butt, M., & Shahzad, A. (2019). The agency of secondary school English teachers and national curriculum change (2006) in Pakistan: Challenges and problems. *Journal of Research*, *13*(1), 134-147. https://ue.edu.pk/jrre/articles/article13112.pdf

Kausar, S. W. A. (2020). A CRITICAL ANALYSIS OF DIFFERENT EDUCATIONAL SYSTEMS ON STUDENTS'OUTCOME: A CASE STUDY OF PAKISTAN. *Journal of Contemporary Studies*, *9*(II), 89-105. https://jcs.ndu.edu.pk/site/article/view/52

Abbas, A., Basit, I., Akhtar, M., Mehmood, U., & Nazim, F. (2022). SINGLE NATIONAL CURRICULUM AT SCHOOL LEVEL IN PAKISTAN: EXPECTED CHALLENGES, MERITS AND DEMERITS. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *19*(3), 48-65. https://archives.palarch.nl/index.php/jae/article/view/11167

Rinker, J., Dickinson, J. K., Litchman, M. L., Williams, A. S., Kolb, L. E., Cox, C., & Lipman, R. D. (2018). The 2017 diabetes educator and the diabetes self-management education national practice survey. *The Diabetes Educator*, *44*(3), 260-268. https://journals.sagepub.com/doi/abs/10.1177/0145721718765446

Zaman, M. S., Saleem, K., & Ali, S. (2021). Implementation of the Single National Curriculum (SNC) at Primary Level: Teachers' Expectations and Concerns. *Jahan-e-Tahqeeq*, *4*(4), 161-168. https://jahan-e-tahqeeq.com/index.php/jahan-e-tahqeeq/article/view/507

Dilshad, S. A., & Rehmat Shah, D. N. A. (2023). Implementation of Single National Curriculum at primary level: Problems and practices in district Khushab. *Journal of Positive School Psychology*, 465-476. http://mail.journalppw.com/index.php/jpsp/article/view/16372

Bari, F. (2021). Pakistan's education reform test. *Current History*, *120*(825), 133-139. https://online.ucpress.edu/currenthistory/article-abstract/120/825/133/116549

Malik, S. A., Ch, M. S., Batool, Z., & Mahmood, S. (2023). Challenges and opportunities in implementation of single national curriculum: A qualitative inquiry. *Journal of ISOSS*, *9*(1), 85-98. http://www.joi.isoss.net/wp-content/uploads/2023/03/06-J-ISOSS-9-1-Galley-Proof-1.pdf

Panjwani, F., & Chaudhary, C. H. (2022). Towards a rights-based multi-religious curriculum? The case of Pakistan. *Human Rights Education Review*, *5*(2), 56-76. https://journals.oslomet.no/index.php/human/article/view/4506