



RESEARCH PAPER

Effective Practices of Elementary School Heads in Single National Curriculum Implementation

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ABSTRACT

Education is the backbone of a nation's development. The Single National Curriculum (SNC) was established in order to guarantee equity and consistency in Pakistan's educational system. Previously, multiple curricula were taught across different school systems that was the cause of creating educational disparities. This study examines the perceptions and practices of elementary school heads in SNC implementation, focusing on challenges, preparedness, and resource availability. The study employed a survey research design based on Fullan's Model of Educational Change (1991). A multi-stage cluster sampling technique was used, selecting 250 school heads from Punjab. A validated questionnaire addressing important aspects like vision building, initiative, staff development, monitoring, and restructuring needs was used to gather data. The results show that school administrators have a favorable opinion of SNC and recognize its potential advantages.

Keywords: Single National Curriculum (SNC), School Leadership, Curriculum Implementation, Teacher Training, Education Reform

Introduction

Education plays a pivotal role in national development and curriculum implementation is central to achieving educational objectives. School heads play a crucial role in order to successfully execute curriculum policies and reforms (Muzaffar, 2016; George, 2001). They are responsible of monitoring the efficacy of instructions, converting curriculum objectives in workable plans, and making sure that national educational policies are followed (Stronge, 2021). School administrators now have more responsibility for maintaining a consistent educational system in Pakistan since the Single National Curriculum (CNC) was implemented in 2018. The SNS was designed to unify Pakistan's diverse education system, which previously operated under multiple curricula across public, private, and religious institutions (Muzaffar & Javaid, 2018).

The government sought to eliminate the educational disparities, enhance national cohesion, and attain positive student learning achievements. However, there have been several barriers to the implementation process such as the teacher training, resistance to change, resource constraints, and administrative reorganization (Tayyab, Umer, & Sajid, 2022). This is because these leaders have the responsibility of preparing teachers to support students' learning needs as well as instructional supervision, and curriculum adaptation. But the process of implementation of curriculum is not fixed and needs constant supervision, support from the stakeholders, and adaptability (Vreuls et al., 2022; Naz et al., 2023; Zafar et al., 2023). From the research, to enhance student learning outcomes, to promote SNC adoption, and to engage teachers, several strategies were used (Carl, 2002). The purpose of this research is to examine elementary school heads' attitudes, concerns, and processes regarding the implementation of SNC. Thus, the main objective is to identify

their level of satisfaction, training requirements, preparedness, and organizational restructuring to support policy execution. It will help the policymakers to better formulate the curriculum policies, design profession training programs, and enhance the allocation of funds for sustainable SNC.

Literature Review

Literature review is a written overview of major writings and other sources on a selected topic. Sources covered in the review may include scholarly journal articles, books, and websites. The purpose of literature review is to gain an understanding of the existing research and debates relevant to a particular research topic (Hassan et al., 2024; Rasheed et al., 2025).

Curriculum Implementation and the Role of School Heads

Curriculum implementation is an essential concept in education since it affects students' learning process and academic achievement. It is a process of implementing the set curriculum goals and objectives in line with what is expected of teachers as they facilitate learning (Choudhry, Muzaffar & Javaid, 2016; Onojerena, 2015). School heads have a central role in this process since they are accountable for the delivery of instruction, methods and curriculum, and materials and their implementation at the institutional level (George, 2001). They possess a lot of influence on how a particular curriculum is implemented, practiced, and sustained (Deventer, 2003).

Fullan (1991) notes that the educational change models of curriculum implementation stress school leaders' role in influencing the capacities within the teachers' professional development, training, and enhancement agendas. School heads are responsible for decision-making and problem-solving on implementation challenges as well as cultivating a teaching-learning environment that reflects national education policies. Others are also responsible for handling resistance to change, creating a teaching-friendly environment, and aligning educational objectives to the defined curriculum goals and objectives (Gading, 2024).

At the same time, school heads experience some difficulties in curriculum implementation at their schools. These are lack of teachers' willingness, lack of teaching resources, few training institutions, and need to redesign institutions (Asamoah et al., 2024). It is argued that leadership training and capacity improvement interventions can improve the ability of school leaders to tackle these challenges and boost policy implementation (Cardno, 2003).

Introduction of the Single National Curriculum (SNC)

The Single National Curriculum (SNC) was implemented in Pakistan in 2018 with the aim of standardizing education policies in public, private, and private sector madrasahs. SNC has come at a time when there was a lot of inequality in terms of curriculum, resources, and methods of assessment across Pakistan. These disparities led to inequitable learning achievements and an expansion of the gap between the poor and non-poor learners (Jahanzaib et al., 2021; Raiz et al., 2024).

SNC's central purpose is to ensure that quality education is achievable across the board and is not restricted by the type of school. Moreover, it seeks to foster national unity, equity and access to education, parity, and quality/achievement (Tayyab, Umer, & Sajid, 2022; Munawar et al, 2024). Lastly, the SNC also focuses on Islamic and social aspects, globalization, the environment, and human rights as part of the curriculum.

In order to assist in the development of SNC, the National Curriculum Council was revived in 2019. This body was appointed to work hand in hand with the educationists, policy makers, and heads of schools so that the contents of the syllabi complied with the national and international syllabi. Stakeholders have raised questions on the feasibility, flexibility, and evaluations of the SNC (Ministry of Federal Education and Professional Training, n.d.). Some people, however, opine that SNC has not been effectively implemented in all schools because of regionally relevant linguistic differences, infrastructural differences, or differences in teaching methodologies that exist (Irfan, 2021).

Challenges in Implementing the Single National Curriculum

However, the subsequent problems impede the successful implementation of the SNC. Teacher-related problems are a concern, as most educators assigned to these topics lack adequate training to effectively teach the curriculum. According to experts, some of the problems related with SNC implementation include teachers' lack of professional development and inconsistent implementation of principles (Panjwani & Chaudhary, 2022).

A further issue is to the accessibility and allocation of resources. Public schools in Pakistan encounter significant obstacles, including inadequate physical facilities, outdated textbooks, and a lack of access to information technology. To attain SNC, it is imperative to upgrade classrooms, educators, and educational resources, a difficulty that persists for numerous schools, particularly those in rural regions (Khan, et al., 2024).

Furthermore, it is essential to note that the language barrier poses a significant challenge to the adoption of the SNC. This policy mandates the use of Urdu and English as instructional languages, posing challenges for regional schools where other languages predominate. This has highlighted concerns regarding students' comprehension and a teacher's ability to impart knowledge in diverse linguistic contexts (Rubab, Yousuf, & Dahar, 2021).

Resistance to change is another critical factor affecting SNC implementation. Private schools, accustomed to autonomy in curriculum development, have raised concerns about the standardization of textbooks, evaluation methods, and pedagogical strategies. Some institutions argue that SNC may restrict innovation in teaching methodologies and limit flexibility in adapting to the needs of diverse student populations (Tahir, 2022).

The Role of School Heads in Overcoming Implementation Barriers

Given these challenges, the role of school heads becomes more significant than ever in ensuring the effective implementation of SNC. As instructional leaders, school heads must actively engage with teachers, facilitate training workshops, and provide necessary resources to ensure a smooth transition to SNC (Fullan, 2001).

To successfully implement the SNC framework, school heads need to adopt strategic leadership approaches, including:

Vision Building

Clearly communicating the objectives and benefits of SNC to teachers, students, and parents.

Teacher Training and Professional Development

Organizing seminars, collaborative training sessions, and various educational plans.

Monitoring and Evaluation

The success of SNC implementation and performance evaluation are summarized with an eye toward identifying areas for improvement.

Stakeholder Engagement

It is prudent to collaborate with policymakers, educational departments, and local communities to establish alignment between their expectations and available resources.

Adapting to Contextual Challenges

Facilitating SNC implementation in alignment with the linguistic and structural frameworks present in diverse regions.

Many of the issues that arise during curriculum implementation can be avoided by a capable and successful school leader (Glatthorn, 1987). Research on organizational learning indicates that leaders who distribute leadership and engage teachers in curricular discussions and decision-making are more likely to achieve improved learning outcomes (Dufour, 2002). Moreover, policy assistance for school leaders may improve the implementation of SNC. Grants for teacher training, financial assistance, and other governmental support for digital education can greatly enhance the readiness of school leaders to implement curriculum changes effectively (Ediger, 2014).

Theoretical Framework

The structure that can support a theory is called theoretical framework; it not only encompasses the theory, but narrative explanation about how the researcher engages in using the theory and its underlying assumptions to investigate the research problem (Sadaf et al., 2023).

Fullan's Model of Educational Change

This study is grounded in Fullan's Model of Educational Change (1991), which identifies six key components necessary for successful curriculum implementation. By applying this model to SNC implementation, the study assesses and compares school heads' perceptions and practices in meeting the challenges and facilitative needs for educational improvement. Thus, by identifying how school leaders' approach SNC adoption, policymakers can improve the training programs, distribute resources more efficiently, and enhance strategies of implementing the curriculum across various contexts.

The SNC is a measure toward increasing the educational standardization in Pakistan, which can only succeed when there is good leadership, training, and provision to follow suit. School heads are strategic leaders who must help teachers get ready for change and oversee the implementation of curriculum and management of the school's affairs (Shaheen, 2021). However, some challenges that result from teacher resistance, inadequate infrastructures, and conflicting policies still persist to hamper the implementation of SNC. By embracing change leadership approaches, encouraging teamwork, and increasing stakeholder involvement, school heads can influence change in curriculum. Moreover, sustained policy efforts that include funding, training, and technology in enhancing SNC can also enhance SNC outcomes (Murugi, 2023). As for future studies, there is a need to assess further effects of SNC and effective and sustainable solutions for the systemic educational issues in Pakistan.

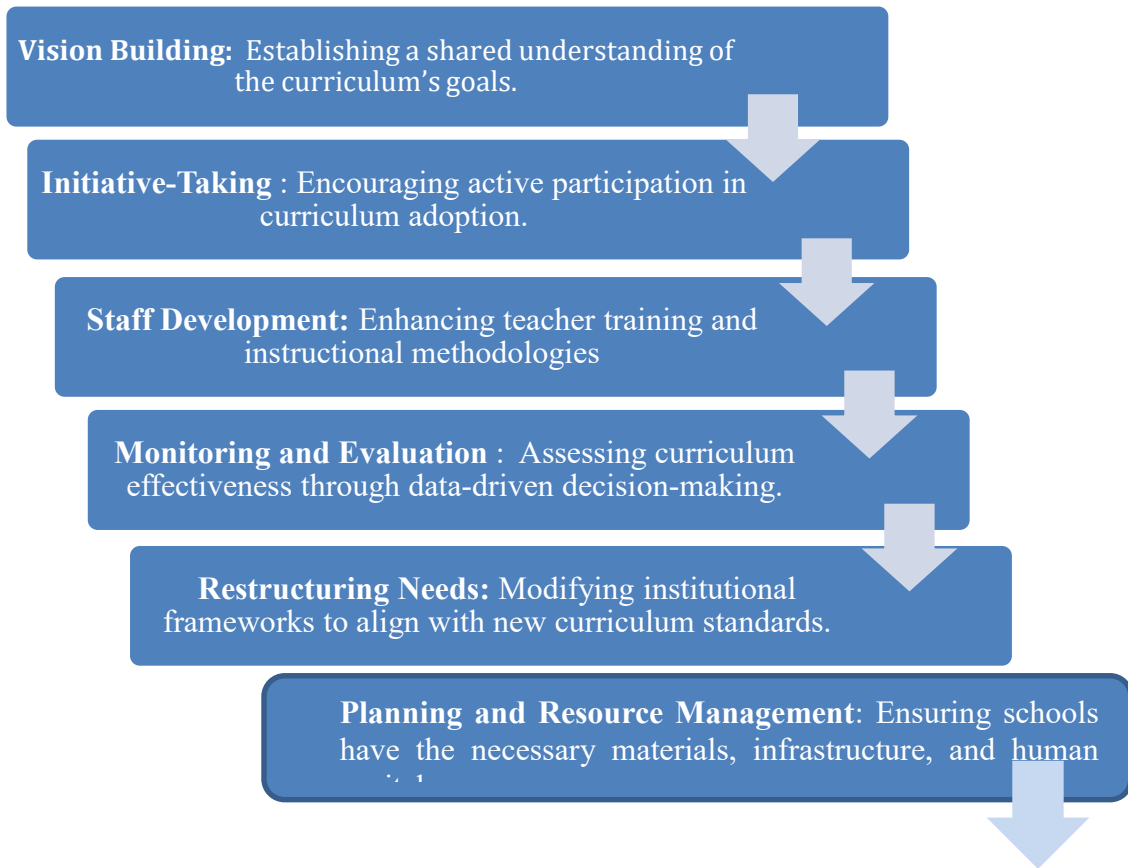


Figure 1: Six Key Components of Fullan's Model of Educational Change

Conceptual Framework

In Fullan's Model of Education Change, some key factors are mentioned that are influencing educational transformation. It highlights the role of vision, initiatives, staff development, monitoring, planning and restructuring needs in shaping educational policies. Each component is linked to practical outcomes such as awareness, training, preparedness and perception. The model emphasizes the importance of vision and structured initiatives like SNC development. Staff training and assessment ensure effective implementation, while monitoring helps evaluate progress. Planning focuses on awareness, preparedness, and training needs, while restructuring address satisfaction and necessary reforms.

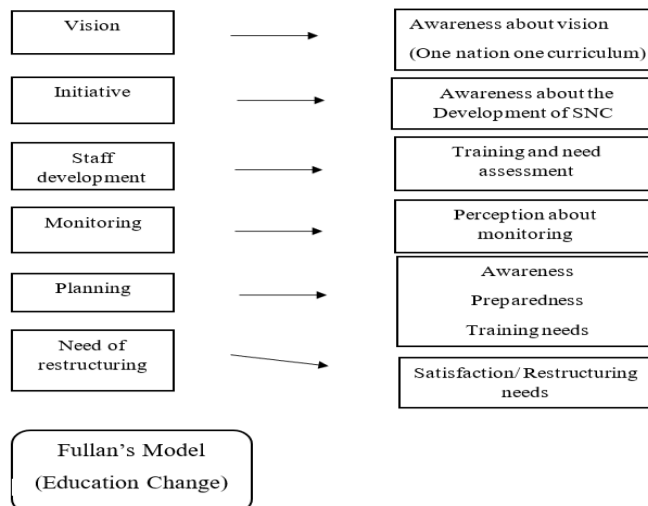


Figure 2: Conceptual Framework

Material and Methods

“The research methodology is the procedure which is used by the researchers to gather data for resolving problems of investigation. Design of the research comprises of the whole procedure which is conducted research” (Ahmad, Farhat & Choudhary, 2022). The study used a survey research design that is widely used in educational research for collecting quantitative data on participants' perceptions and practices. This design was chosen because it ensures an accurate understanding of SNC implementation by enabling the collection of structured response from a sizable sample of school heads. The research is based on Fullan's Model of Educational Change (1991) that emphasizes vision building, staff development, monitoring, and restructuring as essential components of successful curriculum implementation. A self-administered questionnaire was developed and validated to measure the preparedness, awareness, satisfaction and challenges faced by school heads in SNC execution. The survey was designed using Likert-scale-based questions, ensuring a structured and standardized data collection process.

Population

Research population can be referred as an entire group of peoples, things, or objects from which research sample is drawn (Ahmad et al., 2021; Saleem et al., 2024). The study targeted elementary school heads from public and private schools across Punjab, Pakistan. Participants included Headmasters, Headmistresses and principals from both urban and rural areas, ensuring diverse representation. Those were included with at least one year experience to ensure sufficient exposure to SNC implementation.

Sampling Technique and Sample Size

The study employed a multi-stage cluster sampling technique to ensure a representative selection of school heads from diverse geographical and administrative divisions with Punjab. This approach enhanced data reliability by covering various regions, school types, and socio-economic backgrounds. The sampling process was conducted in three stages. The final sample comprised 270 elementary school heads, but due to logistical constraints and non-responses, 250 participated (123 male and 127 females). 60.4% were heads while 39.6% were principals.

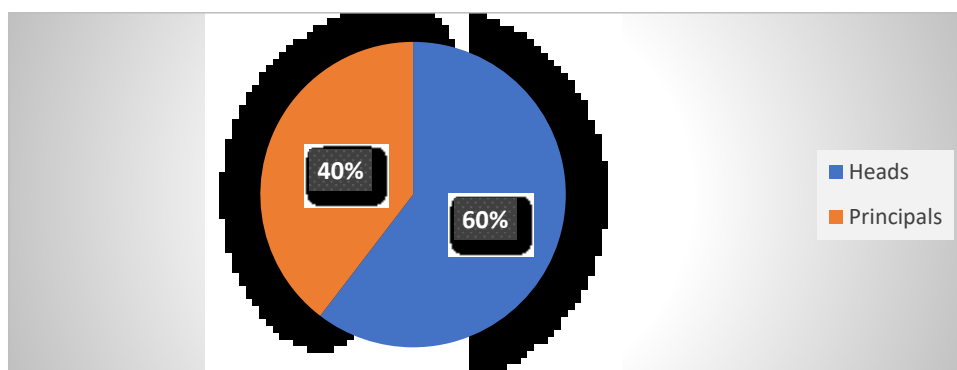


Figure 3: Sampling Ratio

Table 1

The sample included school heads and principals with different level of experience

Year of Experience	Percentage %
1-10 years of experience	50.4%
11-20 years of experience	29.6%
21-30 years of experience	20%

Research Instrument

Instrument perform significant part and helps to assemble accurate information from the contributors (Rao et al., 2023; Saleem, Ullah & Zafar, 2024). A structured questionnaire was developed based on Fullan's Model of Educational Change (1991). The questionnaire was divided into two main sections, Demographic Information and SNC Implementation Factors.

Validity and Reliability

To ensure the validity and reliability of the research instrument, a pilot study was conducted with eight elementary school heads in Lahore. These participants were not included in the final sample. Expert validation was also obtained from curriculum specialists and education researchers. The Cronbach's alpha reliability coefficient was calculated to measure the internal consistency of the questionnaire. The value was 0.96 that indicated the4 high reliability.

Data Collection Procedure

The study followed a structured data collection approach, securing formal approvals and compiling a list of school heads from official records. Questionnaires were administered through personal visits to 115 schools and online outreach to 135 School heads, yielding 115 responses and 20 refusals.

Ethical Considerations

Ethical standards were upheld by informing participants of the study's purpose, all ethical guidelines for conducting educational research strictly followed institutional approval was obtained from the institute of education and research, University of the Punjab.

- Participants provided in formal consent, ensuring voluntary participation.
- Confidentiality of responses was maintained, with no disclosure of personal identifiers.
- The study adhered to the ethical guidelines of the American Educational Research Association (AERA).

Data Analysis

The collected data was analyzed using IBM SPSS (Version 24). Descriptive and inferential statistical techniques were applied, including:

- Mean and Standard Deviation to measure overall perceptions.
- Independent t-tests to compare responses based on gender, experience, and location.
- ANOVA to examine differences across multiple demographic variables.

Results and Discussion

The statistical analysis reveals that school heads strongly believe in the necessity of SNC (M=3.98, SD=0.67) and are generally satisfied with its implementation (M=3.85, SD=0.63). Vision-building (M=3.77, SD=0.66) and awareness (M=3.73, SD=0.62) suggest

moderate commitment and understanding. However, preparedness ($M=3.78$, $SD=0.61$) and restructuring needs ($M=3.80$, $SD=.62$) indicate areas requiring improvement. Notably, training of school heads received the lowest score ($M=2.85$, $SD=0.74$), highlighting a need for enhanced leadership training. In contrast, staff training ($M=3.83$, $SD=0.63$) appears more developed. These findings suggest that while school heads play a crucial role, targeted interventions in training and restructuring are essential for better SNC implementation.

Table 2
Mean and SD of the Factors Involved in Practices of Heads Implementation in SNC

Factors	M	SD
Perception	3.98	.67
Vision Building	3.77	.66
Awareness	3.73	.62
Satisfaction Level	3.85	.63
Preparedness	3.78	.61
Perception About Monitoring	3.81	.65
Training of Heads	2.85	.74
Training of Staff	3.83	.63
Restructuring Needs	3.80	.62

The table 2 shows the Perception ($M,3.98$ & $SD.67$), Vision Building ($M,3.77$ & $SD.66$), Awareness ($M,3.73$ & $SD.62$), Satisfaction Level ($M,3.85$ & $SD.63$), Preparedness ($M,3.78$ & $SD.61$), Perception About Monitoring ($M,3.81$ & $SD.65$), Training of Heads ($M,2.85$ & $SD.74$), Training of Staff ($M,3.83$ & $SD.63$), and Restructuring Needs ($M,3.80$ & $SD.62$) were the Mean and SD of the factors involved in practices of heads implementation in SNC

Discussion

The findings suggest that school heads play a crucial role in SNC implementation, actively engaging in-vision building and staff development. However, gaps in training and preparedness remain evident. The low training score for school heads suggests a need for targeted professional development programs to enhance their leadership capacity. This aligns with the findings of Fullan (1991), who emphasized the importance of continuous professional development for effective curriculum change. Similarly, Hallinger and Heck (2010) highlighted that leadership training significantly impacts curriculum implementation success. The high restructuring needs score implies that administrative and organizational modifications are required to facilitate better SNC execution, as also suggested by Bush (2018), who argued that structural improvements are essential in educational reforms.

Effective monitoring and evaluation systems should also be established to support curriculum implementation. Research by Darling-Hammond et al.(2020) confirms that systematic monitoring is crucial for sustaining curriculum reforms. School heads acknowledged the importance of SNC but faced challenges in aligning its principles with practical application due to limited resources and resistance to change. Addressing these issues through policy interventions and leadership training programs will be essential for improving the implementation process.

Conclusion

The study concludes that while school heads are committed to implementing SNC, gaps in training, monitoring, and restructuring need to be addressed. Leadership development programs and policy revisions can enhance curriculum implementation effectiveness.

Recommendations

- Regular workshops and in-service training for school heads and teachers.
- Implement standardized assessment mechanisms to track SNC progress.
- Ensure adequate funding and facilities to support curriculum changes.
- Involve teachers, parents, and policymakers in curriculum planning and feedback.
- Define clear responsibilities for school heads to streamline SNC implementation.

References

- Ahmad, A., Farhat, P. A., & Choudhary, S. M. (2022). Students' Insights about the Influence of Text Messaging on Academic Writing Skills. *Journal of Development and Social Sciences*, 3(4), 522-533. [https://doi.org/10.47205/jdss.2022\(3-IV\)49](https://doi.org/10.47205/jdss.2022(3-IV)49)
- Ahmad, A., Maitlo, S. K., Rasheed & Soomro, A. R., Ahmed, A. (2021). Impact of Phonological Instructions in the Enhancement of ESL Learners' Pronunciation. *Remittances Review*, 6(1), 94-109. <https://doi.org/10.33182/rr.v6i1.125>
- Asamoah, M. K., & Oheneba-Sakyi, Y. (2024). Factors influencing the willingness, and reluctance of lecturers to embrace learning management systems in two selected Ghanaian universities. *E-Learning and Digital Media*, 21(4), 387-405. <https://doi.org/10.1177/20427530231156172>
- Cardno, C. (2003). *Action Research: A Developmental Approach*. New Zealand Council for Educational Research, PO Box 3237, Wellington, New Zealand.
- Carl, A. (2005). The "voice of the teacher" in curriculum development: a voice crying in the wilderness?. *South African journal of education*, 25(4), 223-228. <https://hdl.handle.net/10520/EJC32059>
- Choudhry, I. A., Muzaffar, M., & Javaid, M. A. (2016). School Environment and Political Awareness at Secondary Level: A Case Study of Pakistan, *Pakistan Journal of Social Sciences*, 36(2), 991-1000
- DuFour, R. (2002). The learning-centered principal. *Educational leadership*, 59(8), 12-15.
- Ediger, M. (2014). The changing science curriculum. *College Student Journal*, 48(4), 648-651.
- Fullan, M. (2014). *Teacher development and educational change*. Routledge.
- Gading, S. J. L. (2024). Instructional Leadership Practices of the School Heads to Improve Teachers Performance. *United International Journal for Research & Technology*, 5(6), 89-119. <https://uijrt.com/articles/v5/i6/UIJRTV5I60006.pdf>
- Glatthorn, A. A. (1987). *Curriculum Renewal*. Publication Sales, Association for Supervision and Curriculum Development, 125 North West Street, Alexandria, VA 22314 (Stock No. 611-86060; \$8.75).
- Hadi Chaudhary, C., & Panjwani, F. (2022). Towards a rights-based multi-religious curriculum? The case of Pakistan. *Human Rights Education Review*, 5(2), 56-76. <https://doi.org/10.7577/hrer.4506>
- Hassan, S., Saleem, Z., & Saleem, R. (2024). Efficacy of Medium of Instruction in Educational Setting at Elementary Level. *Remittances Review*, 9(4), 1823-1835. <https://doi.org/10.33282/rr.vx9i2.101>
- Khan, A., Hina, K., & Ahmad, N. (2024). An Analysis Of Single National Curriculum Of Pakistan In Relation To Un Sdgs On Education. *Pakistan Journal of International Affairs*, 7(3), 246-260. <https://doi.org/10.52337/pjia.v7i3.1145>
- Li, Y., Yang, X., Ran, Q., Wu, H., Irfan, M., & Ahmad, M. (2021). Energy structure, digital economy, and carbon emissions: evidence from China. *Environmental Science and Pollution Research*, 28, 64606-64629. <https://link.springer.com/article/10.1007/S11356-021-15304-4>

- Munawar, N., Zafar, J. M., Rasheed, H. R., & Munawar, A. (2024). Effect Of Feedback On Students' Learning At Primary Level: An Analysis. *Educational Administration: Theory and Practice*, 30(8), 480-485.
- Ministry of Federal Education and Professional Training, n.d. <https://www.mofept.gov.pk/>
- Mohanakumar, S., & Tharian George, K. (2001). Impact of economic reforms on tyre industry. *Economic and political weekly*, 36(12), 1044-1050. <http://www.jstor.org/stable/4410430>
- Murugi, R. M., & Mugwe, M. (2023). Stakeholders' involvement and school leadership for effective implementation of strategic planning. *Journal of Research Innovation and Implications in Education*, 7(2), 277-286. <https://jrjiejournal.com/wp-content/uploads/2023/07/JRIIE-7-2-026.pdf>
- Muzaffar, M. (2016). *Educational Institutions and Political Awareness in Pakistan: A Case of Punjab*, Unpublished Ph. D Dissertation, International Islamic University Islamabad, Pakistan
- Muzaffar, M. & Javaid, M. A. (2018). Curriculum and Political Socialization: a Case Study of Secondary Schools in Pakistan, *Journal of Political Science and International Relations*, 4(2), 21-31
- Naz, L. H., & Zafar, J. M. (2023). The Role of External Monitoring in Enhancing the Academic Quality in Secondary Schools. *Al-Qanṭara*, 9(3), 685-706. <https://doi.org/10.5281/zenodo.13317062>
- Onojerena, E. J. (2015). The role of school managers in curriculum implementation in Nigerian Secondary schools. *Foeaaau. com/?= 742. Studies in Education*, 14 (1), 742-752.
- Rao, I. S., Jeevan, S., & Ahmad, A. (2023). Impact of Metacognitive Strategies on Creative Writing of ESL Students at College Level in District Lahore. *Global Language Review*, VIII(I), 315-324. [https://doi.org/10.31703/glr.2023\(VIII-I\).29](https://doi.org/10.31703/glr.2023(VIII-I).29)
- Rasheed, B., Abbasi, I. A., Abbasi, R. H., & Saleem, R. (2025). Exploring Grammatical Errors in ESL Students English Writings at University Level. *Dialogue Social Science Review (DSSR)* (3)2, 766-775.
- Riaz , M., Shahzad, A., & Kubra, K. T. (2024). The Impact of School Principals' Leadership Style, Teachers' Personality and School Climate on Students' Academic Performance in Pakistan. *Journal of Development and Social Sciences*, 5(3), 646-657. [https://doi.org/10.47205/jdss.2024\(5-III\)58](https://doi.org/10.47205/jdss.2024(5-III)58)
- Rubab, U., Yousuf, M. I., & Dahar, M. A. (2021). Analysis of Peace Education in Social Studies Curriculum at Elementary Level. *Journal of Educational Sciences & Research*, 8(1), 61-78.
- Sadaf, H., Rasheed, B., & Ahmad, A. (2024). Exploring the Role of YouTube Lectures, Vlogs, and Videos in Enhancing ESL Learning. *Journal of Asian Development Studies*, 13(2), 657-670. <https://doi.org/10.62345/jads.2024.13.2.52>
- Saddiq, M. S., Iqbal, S., Hafeez, M. B., Ibrahim, A. M., Raza, A., Fatima, E. M., ... & Ciarmiello, L. F. (2021). Effect of salinity stress on physiological changes in winter and spring wheat. *Agronomy*, 11(6), 1193. <https://doi.org/10.3390/agronomy11061193>

- Saleem, R., Ullah, N., & Zafar, J. M. (2024). Effect of Emotional Intelligence on Students' Academic Performance at University Level: A Novel Perspective. *Pakistan Social Sciences Review*, 8(4), 586–595. [https://doi.org/10.35484/pssr.2024\(8-IV\)54](https://doi.org/10.35484/pssr.2024(8-IV)54)
- Saleem, R., Ullah, N., & Zafar, M. (2024). Impact of Emotional Intelligence on Academic Success: A Self-Efficacy Perspective. *Journal of Asian Development Studies*, 13(4), 1109-1120. <https://doi.org/10.62345/jads.2024.13.4.90>
- Shaheen, K. M., & Mahmood, S. T. (2021). Evaluating The Teachers Training Program or Implementation of Single National Curriculum.
- Stronge, J. H., & Xu, X. (2021). *Qualities of effective principals*. ASCD.
- Tahir, A. H., Umer, M., Nauman, S., Abbass, K., & Song, H. (2024). Sustainable development goals and green human resource management: A comprehensive review of environmental performance. *Journal of Environmental Management*, 370, 122495. <https://doi.org/10.1016/j.jenvman.2024.122495>
- 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://doi.org/10.52131/pjhss.2022.1001.0196>
- Van Jaarsveld, J. G. S., Van Deventer, J. S. J., & Lukey, G. C. (2003). The characterisation of source materials in fly ash-based geopolymers. *Materials Letters*, 57(7), 1272-1280. [https://doi.org/10.1016/S0167-577X\(02\)00971-0](https://doi.org/10.1016/S0167-577X(02)00971-0)
- Vreuls, J., Koeslag-Kreunen, M., van der Klink, M., Nieuwenhuis, L., & Boshuizen, H. (2022). Responsive curriculum development for professional education: Different teams, different tales. *The Curriculum Journal*, 33(4), 636-659. <https://doi.org/10.1002/curj.155>
- Zafar, J. M., Ullah, N., & Azhar, A. S. (2023). Role of Academic Head in Sharpening Leadership Traits Among Teachers and Students in Girls Secondary Schools. *Journal of Development and Social Sciences*, 4(3), 164–171. [https://doi.org/10.47205/jdss.2023\(4-III\)17](https://doi.org/10.47205/jdss.2023(4-III)17)