INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

FROM THE STAFFROOM TO THE CLASSROOM: STAKEHOLDER PERSPECTIVES ON EDUCATION QUALITY IN PAKISTAN

Dr. Summiya [1], Samina Naz [2], Ummaimah [3]

DOI: https://doi.org/10.63544/ijss.v3i4.340

Affiliations:

[1] Lecturer, The Islamia University of Bahawalpur, Bahawalnagar Campus, Punjab, Pakistan
Email: dr.summiya.edu@gmail.com

[2] M.Phil. Scholar, The Islamia University of Bahawalpur, Bahawalnagar Campus, Punjab, Pakistan
Email: saminana2619@gmail.com

[3] MPhil Chemistry, Institute of Chemistry, University of the Punjab, Lahore, Pakistan
Email: ummaimah.work@gmail.com

Corresponding Author's Email:

[1] dr.summiya.edu@gmail.com

Copyright:

Author/s

License:

Article History:
Received: 26.11.2024
Accepted: 19.12.2024
Published: 31.12.2024

Abstract

The quality of secondary education in Pakistan is not just determined by the classroom dynamics, but also by the environment of the classroom, which includes the workplace environment of teachers, teaching materials, including the language of instruction, and the curriculum they follow in class. This study has invited the people in these conditions' close circle to make their evaluations. Closed ended questionnaires with 5 point agreement scale were filled out by 20 principals, 60 teachers, and 120 students from 10 higher secondary schools and 10 intermediate colleges in a district of Southern Punjab. Job security was agreed to by the majority of teachers (80); in-service training (72); fair marking and examination (83); and the teachers' aid to students (77). They were less enthusiastic about the teaching resources: Only 35% agreed that there was laboratory equipment available, and only 23% agreed that audio-visual aids were used properly. Less than half believed that the curriculum was internationally standard (40%) and fulfilled the objectives (35%); principals were also skeptical regarding international standard and critical thinking skills. As to the medium of instruction, the majority of teachers (83%), students (80%) and principals (70%) agreed that language Urdu was a useful medium whereas approximately two teachers and students out of five agreed in regard to English. These results show that the respondents considered that teaching effort is a less hindering source for their insufficient performance in secondary education, when compared to missing material taught, and out-of-touch and out-of-classroom content.

Keywords: Quality of Education, Secondary Education, Teaching Material, Curriculum, Language of Instruction, Pakistan.

1. Introduction

Secondary education is an important stream in Pakistan due to the significance attached to it. To a lot of young people, it's simply the final stage before getting to work, and for other young people, it's as close as to college and university. The condition of this stage thus influences on both the workforce and on the stock of students going on to higher education (Hanushek & Woessmann, 2012). However, issues of quality at this level have been longstanding and recent researches further confirms a lack of equipment, inequities in teacher preparation, and many who believe the curriculum is not well suited for the needs of students (Shahzadi et al., 2023; World Bank, 2018).

Quality is not one; it is many (UNESCO, 2005). It's determined by the teacher, the environment they teach in, the lessons they have to handle, the curriculum they're requested to provide and the language they teach. All of them can facilitate and obstruct learning. The judgments that people within schools make are an on the ground look at the functioning of the system as well as what is not.

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

Most of the studies which have been conducted on school quality in Pakistan involve one set of stakeholders, typically teachers or head teachers. To make it easy to compare the views of principals, teachers, and students with regard to these same aspects of secondary education, each of these three groups was asked to make the same judgments. Present study concentrates on four main themes: the working conditions of teachers, teaching and assessment methods, teaching resources and the curriculum, and which language of instruction is most useful to respondents.

2. Literature Review

While the power of teachers to make a direct impact on learning is one of the most direct that any school has, their effectiveness is related to the environment that they operate within (Aslam & Kingdon, 2011). Low salary for secondary school teachers, negative working environment and lack of further career opportunities led to teachers' low job satisfaction which in turn influenced classroom teaching quality among secondary school teachers in Punjab, revealed a study (Ahmed et al., 2021; Skaalvik & Skaalvik, 2011).

Modern laboratories, up to date materials, audio visuals enable teachers to delve beyond the lecture mode and allow students to experience the lessons they are learning first hand (Hofstein & Lunetta, 2004). This issue of limited materials and lab equipment poses an obstruction between the students and their learning the science teachers of the public schools in Pakistan state (Shahzadi et al., 2023). Research also corroborates this finding across the globe: technology and other instructional technologies have a positive impact on learning only when wards, maintained and used by teachers (UNESCO, 2023).

The notion of quality in education is a multidimensional one, which can be explained as regards competence of teachers, leadership of institutions, implementation of educational policy, a professional development, efficiency of curriculum, and provision of appropriate learning opportunities. For Pakistan, an understanding of the quality of education needs to take into account the formal policy, institutional policy and the interpretation and implementation of the policies by teachers, school leaders and other stakeholders. Focusing on teacher capacity building, leadership development, and the integration of education reform into rich learning opportunities in the classroom are noted in the literature.

In Pakistan, teacher professionalism and implementation of National standards are main concerns with improving education quality. Ullah et al. (2022) explored the practices of teachers in comparison with the National Professional Standards for Teachers in Pakistan, thereby emphasizing the need for teachers to assess their practices in their light of the established standards. Likewise, Shakir et al. (2023) looked at how the national professional standards are reflected in the work to enhance teaching quality. These studies provide a basis for the understanding of the relationship between the professional standards and classroom practice. But the fact that standards exist doesn't always mean that they are delivered effectively. The practices in which these standards are reflected in day-to-day instruction may vary by teacher, depending on the qualifications, professional experiences, institutional resources and opportunities for professional development. Therefore, it is important to understand stakeholder views in order to determine how well the professional expectations align with the teaching that is undertaken.

Another aspect of the quality of education is the implementation of education policy. Nadeem et al. (2024) examined and compared between the public and private school teachers' perception on the realization of the realization of the Single National Curriculum. The study is relevant to understanding the perception of educational reforms by teachers from different institutional settings. The ways teachers interpret curriculum policies can affect the way they plan, teach, assess and select learning activities in their classrooms. Variations between public and private schools could also be due to differences in institutional capacity, leadership support, resources, and implementation arrangements. These differences indicate that the perspectives of implementers need to be taken into account when assessing education reforms. Thus, stakeholder views can offer ideas about the problems that can arise between policy and classroom.

The quality of education is also related to recruitment and the capacity of the teaching staff. This paper is qualitative study of recruitment policies for primary school teachers in relation to the national professional standards by Azam and Durrani (2024). This topic for their research is significant as it brings focus to recruiting processes that match the skills teachers need in their job. Recruitment policies can help to recruit teachers with relevant content knowledge, pedagogical competence and professional attitudes (Darling-

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

Hammond, 2000). However, recruitment does not necessarily guarantee continued effectiveness of teaching. There is also a need for ongoing professional development for teachers and for their institutions to provide assistance to enhance their capabilities across their career. This is especially relevant in the context of the quality of education that staff members in the school and classroom deliver, in that the qualifications and expectations that are set during the recruitment process should be echoed in the classroom.

Another important consideration in improving teaching is professional development. With reference to the challenges and opportunities that arise when teachers adopt a variety of forms of instruction such as hybrid and remote learning, Rafiq-uz-Zaman (2023a) talked about teacher professional development and well-being. The ability of teachers to meet new pedagogical demands is a key element of their professional efficacy in addition to their initial preparation. Teacher professional development can enhance the planning, instruction, management, and assessment of instruction and the responsiveness to learning needs of students (Desimone, 2009). Concurrently, teacher wellbeing is important as a factor influencing motivation and performance, whereby excess workload, institutional inadequacies and stress can have an impact. The above thoughts suggest that both the institutional support mechanism and the daily experiences of teachers should be included in the analysis of quality education.

Likewise, Rafiq-uz-Zaman (2023b) explored the skills-based education training needs of teachers, outlining their skills, barriers, and development gaps. In this piece, there is a relevant consideration of how teachers' professional capacities relate to the application of an approach in education that focuses on practical skills. Whether or not teachers have the knowledge and skills to make the curricular goals real in teaching and learning activities. If training is lacking or is not meeting the needs of the classroom curriculum, there can be a disconnect between classroom expectations and how the curriculum is implemented. Therefore, the views of stakeholders are useful in determining where there is a need for better alignment between teacher preparation, professional support and expectations in education.

Other factors such as leadership and institutional decision-making also shape the context in which teachers exercise their duties. Educational leaders shape institutional priorities, resource allocation, staff coordination and implement educational initiatives. Supportive leadership can support teachers in their classroom practices, in decision-making and in professional development in school (Leithwood et al., 2008).

The linkage of educational development and the significance of learning opportunities is also significant. Rafiq-uz-Zaman (2022) made a comparative study of successful education in developed and developing countries and discussed the educational approaches as well as the development of practical skills in the two countries. The theme is important for wider debates on the quality of education as education should enable learners to acquire knowledge and skills that meet social and economic demands. The achievement of these goals, however, will be contingent upon the congruency between the curriculum, teacher qualifications, teaching materials, and institutional focus.

The effectiveness of a curriculum may be evaluated in terms of its achievement of its aims, and its preparation of students for life after school. The recurring criticisms in Pakistan are that the secondary curricula are more dependent on memorization and do not provide scope for critical thinking, and they are weak in relation with the needs of society as well as the labor market (Naseer et al., 2020; Nayyar & Salim, 2003). The questions of these concerns have been repeated in discussions of curriculum change but there is little evidence of the judgements made by those who teach and study the curriculum.

The schools in Pakistan belong to a few languages (Coleman, 2010; Rahman, 2002). English is highly appreciated for further education and employment opportunities and survey of English Teachers in Punjab revealed majority of teachers considered English to be important to future of students (Arshad et al., 2022). The question of usefulness in the teachers' and students' minds about English and Urdu as languages of instruction is therefore important.

This study addressed three questions:

RQ1. How do teachers judge their working conditions, teaching and assessment, teaching resources and curriculum at the secondary level?

RQ2. How do principals and students judge selected aspects of the same areas?

RQ3. How useful do teachers, students and principals find English and Urdu as media of instruction?

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

3. Research Methodology

3.1 Design and Participants

A descriptive survey design was used. The population comprised principals, teachers and students of higher secondary schools and intermediate colleges in Multan district, southern Punjab. Twenty institutions were selected at random: ten intermediate colleges and ten higher secondary schools, each group divided equally between boys' and girls' institutions. From these institutions, 20 principals (one per institution), 60 teachers and 120 students took part, with equal numbers of men and women in each group (Table 1).

Table 1

Participants by Group and Gender

Group	Male	Female	Total
Principals	10	10	20
Teachers	30	30	60
Students	60	60	120
Total	100	100	200

Note. Participants came from 20 institutions: ten intermediate colleges and ten higher secondary schools, half for boys and half for girls.

3.2 Instruments

Three closed ended questionnaires were developed from the literature on school quality in Pakistan, one for each group. The teacher questionnaire covered working conditions, resources, leadership, teaching, assessment, curriculum and language of instruction; the student and principal questionnaires covered overlapping areas from their own point of view. Responses were given on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaires were pilot-tested with a small group of respondents before use and revised in the light of their comments.

3.3 Procedure

The researcher visited each institution in person, explained the purpose of the study and distributed and collected the questionnaires. Participation was voluntary, and respondents were assured that their answers would be used only for research.

3.4 Analysis

For each item we report the share of respondents who agreed (agree or strongly agree), were uncertain, or disagreed (disagree or strongly disagree), together with the mean and standard deviation on the 1–5 scale. Because percentages from modest groups can vary by chance, each share of agreement is given with a 95% range calculated (Brown et al., 2001; Wilson, 1927); the true value in the wider population is likely to lie within this range. Teachers' and students' views on the two languages of instruction were compared with the Mann–Whitney test (Mann & Whitney, 1947), which suits ordered answers such as these.

The analysis was limited to items whose response records were complete and could be matched unambiguously to a questionnaire statement: 13 teacher items, 3 student items and 4 principal items. The remaining items were excluded because their records could not be matched reliably to the wording of the questionnaires.

4. Results

4.1 Teachers' Views

Teachers' judgements varied sharply across the four areas (Figure 1; Table 2). They were most positive about teaching and assessment and about their working conditions. Five in six teachers agreed that marking and examination were fair (83.3%) (M = 4.07), and more than three quarters agreed that teachers help students achieve the objectives of their courses (76.7%). Most also agreed that their jobs were secure (80%) and that in-service training was provided (71.7%). Views on pay were more divided: 58.3% were satisfied and 38.3% were not. Teachers were split evenly on whether the principal promoted cooperation (50% agreed, 43.3% disagreed).

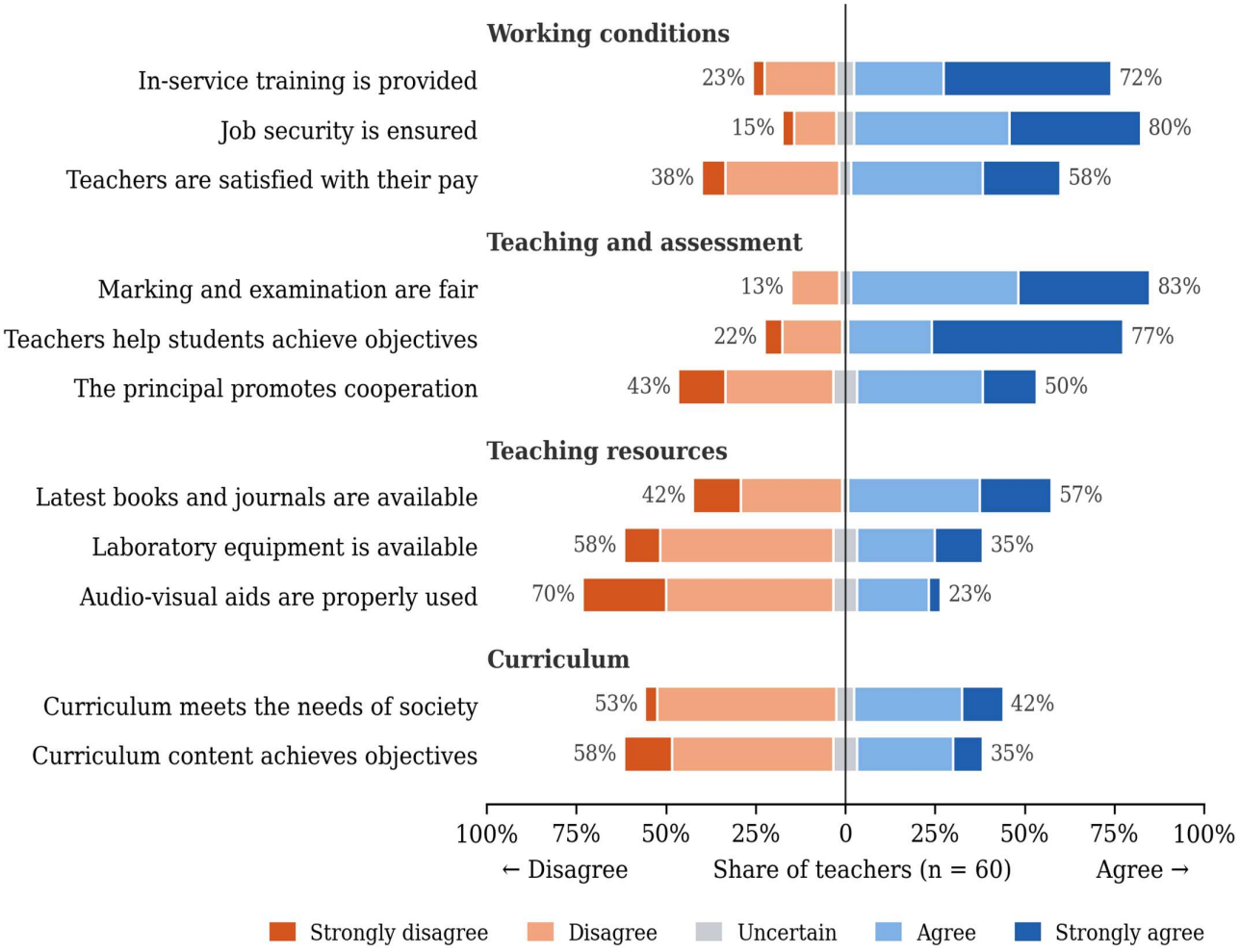
The picture was far less positive for teaching resources and the curriculum. Only 35% of teachers agreed that laboratory equipment and apparatus were available, and fewer than one in four (23.3%) agreed that audio-visual aids were properly used; 70% disagreed. Books and journals fared better but still divided

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

opinion (56.7% agreed). Fewer than half agreed that the curriculum met the needs of society (41.7%), and only about a third agreed that the content of the curriculum achieved its objectives (35%).

Figure 1

Teachers' Agreement With Statements About Four Areas of Secondary Education (n = 60)



INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

Bars to the right of the centre line show agreement and bars to the left show disagreement; the figures at each end give the total share agreeing or disagreeing.

4.2 Principals' and Students' Views

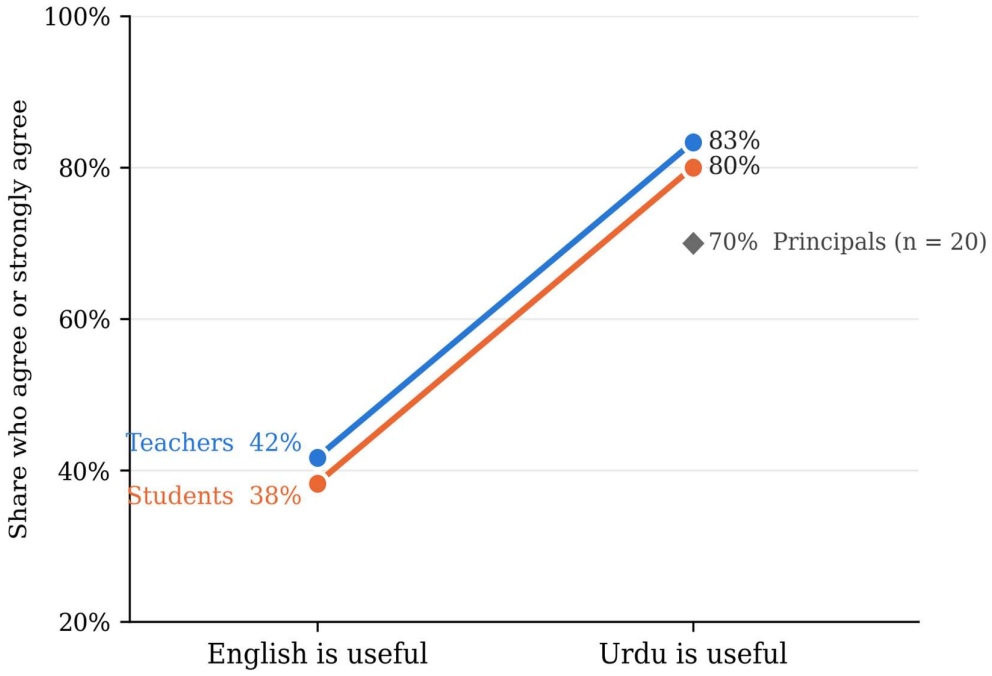
Principals shared teachers' doubts about the curriculum. Only 40% agreed that the present curriculum was at par with international standards, and 45% that it helped students develop critical thinking; in both cases a majority disagreed. Most principals (70%) agreed that their teaching staff was adequate for their institution's needs. Among students, views on whether teachers encouraged co-curricular activities were evenly divided (49.2% agreed, 43.3% disagreed). The principals' results are based on 20 people, so their 95% ranges are wide (Table 2) and should be read with caution.

4.3 Language of Instruction

The three groups agreed closely on language (Figure 2). A large majority of teachers (83.3%), students (80%) and principals (70%) agreed that Urdu was a useful medium of instruction. By contrast, only 41.7% of teachers and 38.3% of students agreed that English was useful as a medium of instruction, and more than half of each group disagreed. Teachers and students did not differ in their views on English (Mann–Whitney U = 3,743.5, p = .63). Teachers were slightly more positive than students about Urdu (U = 4,185.0, p = .041), but the difference was small (rank-biserial r = .16) (Kerby, 2014).

Figure 2

Share of Teachers and Students Who Agreed That English and Urdu Were Useful Media of Instruction



Note. The grey diamond shows principals' agreement with Urdu.

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

Table 2

Agreement With Each Statement by Group

Statement	Group (n)	*M* (SD)	Agree % [95% range]	Disagree %
Working conditions				
In-service training is provided to teachers by the government	Teachers (60)	3.92 (1.28)	71.7 [59.2, 81.5]	23.3
Job security is ensured	Teachers (60)	3.98 (1.10)	80.0 [68.2, 88.2]	15.0
Teachers are satisfied with their pay	Teachers (60)	3.35 (1.31)	58.3 [45.7, 69.9]	38.3
Teaching and assessment				
Marking and examination are fair	Teachers (60)	4.07 (0.97)	83.3 [72.0, 90.7]	13.3
Teachers help students achieve the objectives	Teachers (60)	4.03 (1.30)	76.7 [64.6, 85.6]	21.7
The principal promotes cooperation	Teachers (60)	3.08 (1.34)	50.0 [37.7, 62.3]	43.3
Teaching resources				
Latest books and journals are available	Teachers (60)	3.22 (1.40)	56.7 [44.1, 68.4]	41.7
Laboratory equipment and apparatus are available	Teachers (60)	2.80 (1.27)	35.0 [24.2, 47.6]	58.3
Audio-visual aids are properly used	Teachers (60)	2.33 (1.14)	23.3 [14.4, 35.4]	70.0
Curriculum				
Curriculum meets the needs of society	Teachers (60)	2.97 (1.19)	41.7 [30.1, 54.3]	53.3
Curriculum content achieves course objectives	Teachers (60)	2.72 (1.24)	35.0 [24.2, 47.6]	58.3
Present curriculum is at par with international standards	Principals (20)	2.60 (1.60)	40.0 [21.9, 61.3]	55.0
Present curriculum develops critical thinking	Principals (20)	2.75 (1.65)	45.0 [25.8, 65.8]	55.0
Staff and activities				
Teaching staff is adequate for needs	Principals (20)	3.50 (1.54)	70.0 [48.1, 85.5]	30.0
Teachers encourage co-curricular activities	Students (120)	3.15 (1.24)	49.2 [40.4, 58.0]	43.3
Language of instruction				
English as medium of instruction is useful	Teachers (60)	3.02 (1.20)	41.7 [30.1, 54.3]	55.0
English as medium of instruction is useful	Students (120)	2.92 (1.16)	38.3 [30.1, 47.3]	58.3
Urdu as medium of instruction is useful	Teachers (60)	4.00 (0.94)	83.3 [72.0, 90.7]	13.3
Urdu as medium of instruction is useful	Students (120)	3.72 (1.03)	80.0 [72.0, 86.2]	15.0
Urdu as medium of instruction is useful	Principals (20)	3.45 (1.32)	70.0 [48.1, 85.5]	25.0

Note. Scores range from 1 (strongly disagree) to 5 (strongly agree). Agree = agree or strongly agree; disagree = disagree or strongly disagree; the remainder were uncertain. The 95% range is the Wilson interval for the share agreeing.

5. Discussion

5.1 Effort Is Not the Main Problem

In this research teachers regarded themselves as effective in assisting students in achieving their goals, marking was considered as fair and also believed that marketers received in-services which helped them with their work. However interpretable self-assessment is, it seems to indicate that deficits in basic support

INVERGE JOURNAL OF SOCIAL SCIENCES
https://invergejournals.com/
ISSN (Online): 2959-4359, ISSN (Print): 3007-2018
Volume 3 Issue 4, 2024

(instructions of secondary school) and also in effort are not the primary problem area. Their doubts lay elsewhere. Pay was a topic of debate as was similar evidence in other studies will suggest that how much one is paid and working conditions relates to their satisfaction in Pakistan in general for Punjab in particular (Ahmed et al., 2021) while only half believed that principals enabled cooperation, suggesting there are also divergent practices across schools.

5.2 Missing Materials

The greatest need was identified as a lack of teaching material. Laboratory equipment was not found available by most teachers and there were very few who believed that audio-visual aids were utilized effectively. A survey of the secondary schools in Pakistan and of science teachers across the country (Shahzadi et al., 2023), reveals similar findings to those that follow. Even with a good teacher, without laboratories and teaching aids, teachers have little option but to teach by lecturing and memorising, explaining, which might account for why the teacher remains sure in his/her efforts but doubts in the quality of teaching.

5.3 A Curriculum That Is Felt to Be Out of Touch

Other staff members, such as teachers and principals, were also not confident in the curriculum. None of them thought that it served the need of society, none of them felt that it gained its goals, none of them felt that it achieved international standards or developed critical thinking. This is a very unusual degree of consensus from two viewpoints of the curriculum and the welcome contribution to the debate over relevance of the curriculum with practitioner voices. Findings indicate that curriculum review should directly involve teachers and principals; and place greater emphasis on thinking skills and knowledge beyond the school context.

5.4 Language of Instruction

The highest level of agreement, with comments from everyone, was about language. Four in five teachers and students said Urdu served as a useful medium of instruction while about two in every five said same about English. That doesn't imply teachers don't value English, however, rather in past research they were found to view English very important to students' futures (Arshad et al., 2022; Shamim, 2011). Instead, it implies that "content people," when they teach and learn content, use a language they already know.

5.5 Implications

Based on the results three practical steps follow. First, more investment in the laboratory and training with laboratory equipment, and its use, is likely to be more important than additional general training. Second, the curriculum review must be based upon experience of teachers and principals and place more emphasis on critical thinking and relevance. Third, language policy should recognize the language(s) in which the students can grasp the content and this is met by providing clear Urdu learning while developing English language as a content area.

5.6 Limitations

The study has some limitations. It depended on the respondents' own interpretations which can be tinged by their standpoint; such as teachers may give themselves a high rating (Podsakoff et al., 2003). It was conducted in one district and principals' group was limited so the findings are to be regarded with caution, especially for principals. The questionnaires were not used as part of this study, and they did not report the reliability, nor could this be assessed for some of the items due to the inability to link to the wording of the questionnaire (Tavakol & Dennick, 2011). Future research is recommended to test and validate instruments with reliably reported scales, high numbers of participants and diversified samples, and to rely on direct evidence as an instrument, such as classroom observation or school resource audits.

6. Conclusion

In the eyes of principals, teachers and students in this study, secondary education was a good intentioned but poorly equipped education. Teachers were certain in their own work capability, their fair evaluation and security of employment, but few teachers were not sure of the availability and use of laboratories and teaching aids, or the curriculum to suit societal needs. Urdu is used by majority of people as a much more useful medium as compared to English in all three groups. In Pakistan, improving the quality of secondary education will therefore rely not on teachers' efforts to do more, but on providing them with materials, guiding them through an appropriate curriculum, and providing language and other context

conditions needed for good teaching to take place.

Conflict of Interest Statement

The authors declare no conflicts of interest.

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

References

Ahmed, G., Mughal, S. H., & Kalhoro, I. A. (2021). Challenges of teachers' job satisfaction and its effects on students' learning at secondary level in Punjab Province, Pakistan. *Journal of Development and Social Sciences, 2*(3), 34–48. https://doi.org/10.47205/jdss.2021(2-III)5

Aslam, M., & Kingdon, G. (2011). What can teachers do to raise pupil achievement? *Economics of Education Review, 30*(3), 559-574. https://doi.org/10.1016/j.econedurev.2011.01.001

Azam, J., & Durrani, R. (2024). Recruitment policies for primary school educators and national professional standards: A qualitative analysis. *Journal of Education and Social Studies*. https://doi.org/10.52223/jess.2024.5201

Brown, L. D., Cai, T. T., & DasGupta, A. (2001). Interval estimation for a binomial proportion. *Statistical Science, 16*(2), 101-133. https://doi.org/10.1214/ss/1009213286

Coleman, H. (Ed.). (2010). *Teaching and learning in Pakistan: The role of language in education*. British Council.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8*(1). https://doi.org/10.14507/epaa.v8n1.2000

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181-199. https://doi.org/10.3102/0013189X08331140

Hanushek, E. A., & Woessmann, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth, 17*(4), 267-321. https://doi.org/10.1007/s10887-012-9081-x

Hofstein, A., & Lunetta, V. N. (2004). The laboratory in science education: Foundations for the twenty-first century. *Science Education, 88*(1), 28-54. https://doi.org/10.1002/sce.10106

Kerby, D. S. (2014). The simple difference formula: An approach to teaching nonparametric correlation. *Comprehensive Psychology, 3*, Article 1. https://doi.org/10.2466/11.IT.3.1

Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership & Management, 28*(1), 27-42. https://doi.org/10.1080/13632430701800060

Mann, H. B., & Whitney, D. R. (1947). On a test of whether one of two random variables is stochastically larger than the other. *Annals of Mathematical Statistics, 18*(1), 50–60. https://doi.org/10.1214/aoms/1177730491

Nadeem, M. A., Khan, Z. A., & Rafiq-uz-Zaman, M. (2024). A comparative analysis of public and private school teachers perception on single national curriculum implementation. *International Journal of Academic Research for Humanities, 4*(3), 209–218. https://doi.org/10.5281/zenodo.13741847

Naseer, H., Muhammad, Y., & Masood, S. (2020). Critical thinking skills in a secondary school Pakistan studies textbook: A qualitative content analysis. *sjesr, 3*(4), 84–95.

Nayyar, A. H., & Salim, A. (Eds.). (2003). *The subtle subversion: The state of curricula and textbooks in Pakistan*. Sustainable Development Policy Institute.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879

Rafiq-uz-Zaman, M. (2022). Comparative analysis of skill-based education in developed and developing countries. *Inverge Journal of Social Sciences, 1*(2), 90–95. https://doi.org/10.63544/ijss.v1i2.204

Rafiq-uz-Zaman, M. (2023a). Teacher professional development & well-being in the era of hybrid and remote instruction: Challenges, opportunities, and pathways forward. *Inverge Journal of Social Sciences, 2*(4), 76–88. https://doi.org/10.63544/ijss.v2i4.211

Rafiq-uz-Zaman, M. (2023b). Teacher training needs for skill-based education: A review of competencies, barriers, and professional development gaps. *Inverge Journal of Social Sciences, 2*(3), 166–182. https://doi.org/10.63544/ijss.v2i3.212

Rahman, T. (2002). *Language, ideology and power: Language-learning among the Muslims of Pakistan and North India*. Oxford University Press.

Shahzadi, I., Hassan, K. H. U., & Zahid, F. (2023). Role of laboratories and science teaching material in science teaching and students learning at secondary level in public schools. *Journal of Development and Social Sciences, 4*(2), 259–264. https://doi.org/10.47205/jdss.2023(4-II)23

Shakir, M., Nadeem, M. T., Gul, F., Hashmi, M. A., & Hussain, W. (2023). Reflection of National Professional Standards for Improving Quality Teaching in Pakistan. *Elementary Education Online, 20*(3), 2104–2109.

Shamim, F. (2011). English as the language for development in Pakistan: Issues, challenges and possibilities. In H. Coleman (Ed.), *Dreams and realities: Developing countries and the English language* (pp. 291-310). British Council.

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education, 27*(6), 1029-1038. https://doi.org/10.1016/j.tate.2011.04.001

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53-55. https://doi.org/10.5116/ijme.4dfb.8dfd

Ullah, S., Mazhar, S., & Baber, S. (2022). Investigation of teachers' practices through National Professional Standards for Teachers in Pakistan. *Pakistan Languages and Humanities Review, 6*(4), 432–442. https://doi.org/10.47205/plhr.2022(6-IV)39

UNESCO. (2005). *EFA global monitoring report 2005: Education for all, the quality imperative*. UNESCO Publishing.

UNESCO. (2023). *Global education monitoring report 2023: Technology in education – A tool on whose terms?* UNESCO. https://doi.org/10.54676/UZQV8501

Wilson, E. B. (1927). Probable inference, the law of succession, and statistical inference. *Journal of the American Statistical Association, 22*(158), 209–212. https://doi.org/10.1080/01621459.1927.10502953

World Bank. (2018). *World development report 2018: Learning to realize education's promise*. https://doi.org/10.1596/978-1-4648-1096-1