



**RESEARCH PAPER**

**Relevance of Teaching Beliefs and instructional Practices of Practitioner Teachers**

<sup>1</sup>Atia Arshad <sup>2</sup>Sher Zaman\*

1. Deputy DEO, Schools Education Department, Gujrat, Punjab, Pakistan

2. Assistant Professor, Department of Education, University of Gujrat, Punjab, Pakistan

\*Corresponding Author: [smzaman@uog.edu.pk](mailto:smzaman@uog.edu.pk)

**ABSTRACT**

The study explored the correlation between teaching beliefs and instructional practices of the teachers regarding four aspects, i.e. beliefs and practices on 'students as self-learners', 'teaching strategies', 'learning environment' and 'assessing learning'. For obtaining data about the teaching beliefs, teachers' beliefs inventory (TBI) was developed and applied, while for measuring their practices, the teachers' performance checklist (TPC) was applied. In the next phase, an interview was conducted to explore the reasons for the identified missing relation between teachers' beliefs and their pedagogical practices during teaching. A representative sample, based on gender and locale was selected from 50 schools with a 106 secondary school teachers being selected from these sites. The findings of the research informed that there was an insignificant correlation between the teachers' teaching beliefs and practices while interacting in classroom. Moreover, most respondents reported the excess of students in a teaching session during classes.

**KEYWORDS** Instructional Practices, School Teachers, Teaching Beliefs

**Introduction**

The current study explores the linkage in teacher's teaching beliefs and their classroom practices as whether there is interdependency. Teachers' beliefs that teachers hold influence their work and play their part during their classroom instruction. Commonly teachers' activities in the classroom have their roots in their teaching beliefs, and those beliefs often work as a source that supports teachers decisions that are frequently made by the practicing teachers (Pajares, 1992; Fullan, 2015). In order to match their views with the real classroom and their current teaching setting, teachers need to have enough time to think on, prepare, and implement their beliefs (Davis, 2006). In classrooms, teachers' instructional beliefs have a significant impact on their pedagogical practises (Deng et al. 2014; Inan & Lowther 2010).

A teacher is a reflective practitioner in addition to delivering awareness, claim Maksimovi et al. (2018). This article examines changes in education, advancements in educational theory, and new roles teachers now perform in classrooms in the setting of Pakistan. Do teachers proactively work to develop their instructional approaches? One of the purposes of this study, which focused on probing instructors' beliefs on improving their instructional practices, is to deliver a solution to this question. It is essential to understand what is lacking in the literature on teachers' beliefs and instructional practices (Baran et al., 2011). Maksimovi et al. (2018) studied instructors' perspectives on exchanging experiences with coworkers, self-evaluating their own work, participating in professional development activities, working with their students, and ways for raising students' knowledge of contemporary social concerns. Because of the sensation of accomplishment or success they experience via particular practices, teachers' methods may also have an impact on students' beliefs.

## Literature Review

According to Handal and Herrington, (2003), "teachers possess reasonable beliefs about teaching issues", while Mansour (2008) also emphasized that teacher's beliefs are embedded in their psychic composition to a great deal. Hoffman and Seidel (2014) suggested that there is an urgent need to explain the concept of teaching beliefs; According to Barcelos (2003) the given beliefs are based on the thought process that enable teachers to think to be aligned in the practices while guiding the students. Haney et al. (1996) explained that teachers' beliefs in the teaching settings means their feelings, contentions, viewpoints and choices etc., for ongoing teaching and learning strategies. However, according to Khader (2012), "teachers' beliefs are a holistic conception of several dimensions related to the philosophical beliefs on education, instruction, curricula, and teaching as a profession, that such beliefs form the "classroom culture" which affects teaching objectives, values, and practices."

The vital role that teacher professional development performs in improving educational standard is widely recognized, and huge resources are devoted to it worldwide. However, given that there is proof of significant disparity in the quality of professional development, it is authoritative and has been strongly supported by both scholars and those in charge of the educational system (McChesney & Aldridge, 2019).

After having reviewed the given relevant research studies, it is ascertained that teachers' teaching beliefs are transformed in ideas having roots in the psycho-socio and cognition of the teachers, where their beliefs contribute in teaching approach (Pajares, 1992 ; Fullan, 2015). Teacher's professional development is heavily emphasized as a main approach of achieving educational goals (Darling-Hammond et al., 2009; Gore et al., 2016). The amount of time and money spent on teacher professional development is significant (Hochberg and Desimone, 2010), and many different tactics are used to boost teachers to participate in professional education (Evans, 2014).

Few of us may know about how beliefs effect practices and how belief oriented skills for effective instruction are developed or how teachers' beliefs come into their practices (Mashford-Pringle & Nardozi, 2013). Richardson (1996) pointed out that there would be three bases of teachers' beliefs: one, individual experiences as learner and teaching practices in particular; two, teachers' own experiences as learners and the information they retain of the different courses contents; and last, their own pedagogical experiences during professional carrier. Beyond this theory-practice split, there is a need for practical theorising that spans the gap between theory and practise (Jackson & Burch, 2016).

Teaching beliefs of teachers are very critical in determining teachers' classroom instructional behaviors. According to Ernest (1998), teachers' practises may be influenced by their ideas by acting on them. Accordingly, Clark and Peterson (1986) theorised that teachers' amount of knowledge storage and their linked information may impact their goals, plans, and practises for teaching. Likewise Cronin-Jones (1991) found that there were many types of teachers' beliefs that have a significant effect on the teachers as implementers of curriculum in its true spirit during instructional process as well as assessment practices conducted by the teachers. Additional subjective aspects of professional development activities suggested for assessment contain the amount of professional significance (Fraser *et al.*, 2007), rationality (Desimone, 2009), teacher's ownership (Earley and Porritt, 2010), knowledgeable encouragement (Fraser *et al.*, 2007) or supportiveness (Hunzicker, 2011) as well as the prospective for teacher intervention and transformative consequences (King et al., 2014).

It is commonly observed that teachers sometimes, while teaching in the classroom do not behave at an optimal level of instruction. This may be because they are weak in their teaching beliefs which are related to their practices in the classroom. Mansour (2008) argued that extensive research studies indicated that the teachers' practices in the classrooms are affected by their beliefs, but the class room conditions in the schools did not seem to reflect the stated situation. It may be helpful in examining teachers' beliefs to clarify how their beliefs and practices are interconnected. According to Shinde and Karekatti

(2012), teachers' beliefs have an impact on their awareness, teaching attitude, teaching techniques, and teaching policies, as well as the growth of their students.

The crucial three factors—teaching beliefs, academic attitudes, and instructional practices—are actually closely related to teaching strategies to address ongoing professional challenges as well as to teachers' general capacity building, which they use to create a positive learning environment and increase student motivation (Richardson, 1996). Yell et al. (1998) studied some certain teachers were studied and found their experiences to address the students' special needs as well as of those students who faced difficulties with learning and are prone to adaptations for achieving the goals. Core beliefs regarding the nature of education, according to Shinde and Karekatti (2012), are likewise hard to change because they have been shaped through a long period of experience and are backed by high authority and widespread acceptance. Contrarily, beliefs that are more recent and peripheral are more dynamic, making them more changeable (Fives & Buehl, 2015). Teacher-centered attitudes frequently emphasise discipline, subject content, and moral norms (Mayer 2003), and are frequently linked to behaviourism (Deng et al. 2014).

### **Material and Methods**

The design of the current study is correlational that assesses the relationship between the two variables, i.e., teaching beliefs and instructional practices of the school teachers at secondary level. Further a quantitative-cum-qualitative research approach, particularly for exploring reasons of the identified gap, was used to complete the study.

The population for the study consists of teachers teaching to lower secondary classes in District Gujrat, Pakistan at the Public (Government) sector schools. Thus results of the data analysis on the present study could be safely generalizable to the secondary schools in public schools of Punjab, Pakistan because almost all the features of classroom culture across the region are similar and the characteristics of the teachers such as their qualifications, selections, modes of training, promotions and particularly their cultural background are alike. Similarly the curriculum, course contents, over school settings and classroom environments, social values at schools, and their infrastructure including physical facilities are common.

At the first stage, 50 schools were selected from to provide an adequate representative sample, at second stage, 106 Secondary School Teachers (SSTs) including male and female, from rural and urban areas were selected. At the second stage to provide data on teachers' classroom teaching practices, 318 students were selected, with three students being selected for each sampled teacher. From each school, there were two teachers; one for arts and the other for science while six students from each school were taken, three for each of the selected teachers, as the source of data collection.

The researchers developed three instruments to address the research questions. After that these scales were piloted on a small scale in three schools. Further, from seven experts, qualitative judgments were given on the validity (linkage in research questions and instruments) while the appropriateness of language was also determined. The final revised versions of all the three instruments were used. The instruments with their focus on four areas are listed below and then described in the table.

- a) 'A Teachers Teaching Beliefs Inventory' (TBI) to explore secondary school teachers teaching beliefs including their beliefs about learners, teaching strategies, classroom environments, and assessment techniques.
- b) A classroom performance check list was developed to observe and record the teachers' teaching activities in real settings, i.e, managing students, interactive teaching strategies etc., managing class, applying rules and doing formative assessment on the way of teaching.

- c) Structured interview protocol for in depth investigation of the background reasons for the identified major gaps between teachers' beliefs and practices, through following questions to the 106 teachers.
- i. What reasons teachers perceive to be the cause of poor 'individual attention' to students in classroom practices?
  - ii. What reasons they bring forward to be the cause of lacking linkage in teaching beliefs and students' teaching learning practices?

**Table 1**  
**Description of Beliefs Inventory on Teachers and their Practices**

Sr.#	Factors	Scope/ Definition	Statements Numbers	Specimen statements on TBI & TPC
1.	Belief about students	Teacher- student relationship and dealings.	1-8	Teacher student relationship needs to be friendly. Teachers pay full attention to slow learners.
2.	Belief about teaching strategies	Teaching techniques and skills.	9-16	A motivated and unmotivated student learn equally. Teacher does his level best to teach efficiently and effectively.
3.	Beliefs of classroom environments	Managing Classroom, hygiene, control and sitting arrangements	17-22	Classroom discipline reflects in complete silence in the hall. Teacher changes Students seating arrangement
4.	Belief for class assessments	Different measuring techniques, significance and appropriateness.	23-28	All the assessment questions need to be of same difficulty. Generally makes difficult tests.

The data was collected on the researcher's personal visits, and the interview was conducted with the fifteen randomly sampled teachers out of the 106 selected from which TBIs were filled during data collection in the first phase of the study. The collected data were analysed through assessing the correlation applying Pearson 'r' statistical tests, while the interviewed data were analysed on the basis of percentage of responses of the sampled teachers in reflecting particular reason/s for the identified gaps in teachers' beliefs and their instructional practices. Analysis results are presented in the following.

## Results and Discussion

The results of data analysis are presented in the following in graphs, tables and interpreted accordingly.

**Table 2**  
**Descriptive on beliefs and practices**

	Students as Learners	Teaching Strategies	Classroom Environment	Assessment
Beliefs	24.42	25.35	21.65	18.22
Practices	26.46	26.46	20.58	11.03

The table 2 reflects that teachers' teaching beliefs and their practices during class teaching were observed, and found students as better learners' than the other factors of classroom like 'environment', 'assessments of learning etc. The former two factors, 'students as learners' and 'teaching strategies' are somewhat better, because they may be more in the mechanism of teachers while classroom arrangement and apparatus needed for effective classroom environment are not within their capacity to equip, add or change where and

when needed. Further assessments were reported as a factor that teachers are least able to change as their assessment techniques particularly as formative assessments, at the secondary level where there is more in control of external agencies like examination boards etc., which explains the cause why the teachers lack in self- efficacy on assessment practices.

**Table 3**  
**Relation between Teachers' Teaching beliefs and Instructional Practices**

Teaching Beliefs	Teachers' instructional practices				
	Students' as learners	Teaching strategies	Classroom environment	Assessments	TIPs
Students' as learners	.03				
Teaching strategies		.10			
Classroom environment			.13		
Assessment				.03	
TsTBs					.07

This insignificant correlation ( $r=.03$ ,  $n=106$ ,  $p>.05$ ), between teachers' teaching beliefs about 'students as learners', and their actual dealings with students is because of the specific reasons as identified through interview, i.e., overcrowded classrooms, life irrelevancy in education and daily life and teacher lack of awareness of students' psychological needs.

There is also negligible correlation ( $r=.10$ ,  $n=106$ ,  $p>.05$ ), between the teachers' teaching beliefs related to 'instructional strategies' and their actual classroom practices. The reasons for the discrepancy as identified were reported as the process of curriculum development and Boards examination demands such as cramming of the contents, horizontal content coverage and marks in examination etc.

The data analysis results showed ( $r=.13$ ,  $n=106$ ,  $p>.05$ ), insignificant correlation between the teaching beliefs and teaching practices during classroom activities and cultures. It was the result of the identified reasons reported by the teachers, that the teachers were helpless in developing their choice and need based class cultures.

There is not significant but even low correlation ( $r=.03$ ,  $n=106$ ,  $p>.05$ ) between the teachers' instructional beliefs about students' assessments for their learning and teachers' continuous assessments procedures. The reason behind the weak and significant correlation is an examination system which is based on cramming, so appropriate instruction could not be pursued in the light of the prevailing examination system.

## Conclusion

Along with the correlation results, the major gaps identified were pursued through an interview data analysis. The very first problem noted was the weakness of teacher-students' relationships, that is; teachers were not providing individual attention to students. This situation is related to the initial factor under investigation i.e., 'students as learners' for which 95% teachers reported their views that the important reasons for the rare interaction in class between teacher and students was the result of overcrowded classrooms. Similarly short duration of period is to 5% of the teachers, another reported reason for ineffective individual attention and interaction for students. In addition to all, as reported in results, the gap in correlation was attributed to lack of life relevant education in classroom teaching to students' for important in their day to day lives. For 90% of the teachers, the reason is the curriculum which fails to connect with their personal, social needs as well as well as even the context of the daily lives of the learners; in contrast only 10% think the faulty examination system is the primary reason for the disconnect. The next issue relates to

'teaching strategies' i.e. reasons for the lack of use of a variety of teaching methods. On the idea, 70% teachers considered that the lack of teaching learning materials was the main reason while 80% of the total teachers suggested that the main reason was teachers' unawareness of various learning theories. Finally, 20% thought that shortage of time was the major reason for effective linkage of pedagogic beliefs and the related practices. They are not supervised or guided in preparing lesson plans, nor in the of the presentation of lessons. Another crucial shortcoming in fostering a positive learning environment is revealed by the weak correlation that 75% of teachers blame school administrators for the "classroom environment," or the unsanitary conditions in classrooms; 15% of teachers believed that teachers themselves were at fault; and 10% of the sampled teachers cited the improper and unfair use of funds as the cause. The traditionally structured classrooms, their seating arrangement was according to 55% teachers, owing to the 'lack of spacious classrooms. Participants considered that teachers should be given authority to utilize the available resources, they should be allowed to take the initiatives to meet the classroom instructional demands and should also be positively affirmed by the institutional head.

### **Recommendations**

The negligible correlation having background identified reasons was attributed to external factors critical for classroom practices such as administration's unwillingness to provide adequate funds for instructional equipment, teaching learning material and other related facilities for conducive learning environments. In the light of the given reasons, the situation could only be remedied if heads of schools took the initiative and action oriented decisions for the improvement of classroom environments for relevant, effective and efficient teaching having high level of students' interest in learning. Additionally, there was no connection between instructors' opinions about employing a diversity of assessment methods and their capacity to put this idea into practice in their assessment procedures. 60% of the instructors who participated in the survey said that the causes for the problems were caused by ineffective educational policies that did not take into account the actual conditions in public schools. Further, assessment was out of the control of the teachers, particularly at secondary level, with external agencies determining the agenda; this could explain why teachers lack self-efficacy in their ability to apply authentic assessment. It is suggested that teachers who were actually teaching classes need to be given opportunities to participate in the assessment process. Efforts should be made to maximize teacher involvement in the development of the assessment process.

**References**

- Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421-439.
- Barcelos, A. M. F. (2003). Researching beliefs about SLA: A critical review. *Beliefs about SLA: New research approaches, 7-33*.
- Clark, C. M. (1984). *Teachers' thought processes* (No. 72). Institute for Research on Teaching, Michigan State University.
- Cronin-Jones, L. L. (1991). Science teacher beliefs and their influence on curriculum implementation: Two case studies. *Journal of research in science teaching, 28*(3), 235-250.
- Darling-Hammond, L., & Richardson, N. (2009). Research review/teacher learning: What matters. *Educational leadership, 66*(5), 46-53.
- Davis, E. A. (2006). Characterizing productive reflection among pre-service elementary teachers: Seeing what matters. *Teaching and Teacher Education, 22*, 281-301.
- Deng, F., Chai, C. S., Tsai, C. C., & Lee, M. H. (2014). The relationships among Chinese practicing teachers' epistemic beliefs, pedagogical beliefs and their beliefs about the use of ICT. *Journal of Educational Technology & Society, 17*(2), 245-256.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational researcher, 38*(3), 181-199.
- Earley, P., & Porritt, V. (2010). Effective practices in continuing professional development—what works. *Professional Development Today, 13*(1), 5-10.
- Ernest, P. (1988). The impact of beliefs on the teaching of mathematics. *Mathematics teaching: The state of the art, 249, 254*.
- Evans, L. (2014). Leadership for professional development and learning: enhancing our understanding of how teachers develop. *Cambridge journal of education, 44*(2), 179-198.
- Fives, H., & Buehl, M. M. (2016). Teachers' beliefs, in the context of policy reform. *Policy Insights from the Behavioral and Brain Sciences, 3*(1), 114-121.
- Fraser, C., Kennedy, A., Reid, L., & Mckinney, S. (2007). Teachers' continuing professional development: Contested concepts, understandings and models. *Journal of in-service education, 33*(2), 153-169.
- Fullan, M. (2015). *The new meaning of educational change*. Teachers college press.
- Gore, J. M., Smith, M., Lloyd, A., Bowe, J. U. L. I. E., Ellis, H. Y. W. E. L., Taggart, W. E. N. D. Y., & Lubans, D. A. V. I. D. (2016). The impact of Quality Teaching Rounds: Report on the results of a randomised controlled trial. *Teachers and Teaching Research Centre: University of Newcastle*.
- Handal, B. & Herrington, A. (2003). " Mathematics teachers' beliefs and curriculum reform". *Mathematics Education Research Journal, 15*(1), 59-69.
- Haney, J., Czerniak, C. & Lumpe, A. (1996). " Teacher beliefs and intentions regarding the implementation of science education reform strands". *Journal of Research in Science Teaching, 33*(9), 971-993.

- Hochberg, E. D., & Desimone, L. M. (2010). Professional development in the accountability context: Building capacity to achieve standards. *Educational psychologist, 45*(2), 89-106.
- Hoffman, B. H., & Seidel, K. A. R. (2014). Measuring teachers' beliefs: for what purpose?. In *International handbook of research on teachers' beliefs* (pp. 118-139). Routledge.
- Hunzicker, J. (2011). Effective professional development for teachers: A checklist. *Professional development in education, 37*(2), 177-179.
- Inan, F. A., & Lowther, D. L. (2010). Factors affecting technology integration in K-12 classrooms: A path model. *Educational technology research and development, 58*, 137-154.
- Jackson, A., & Burch, J. (2016). School Direct, a policy for initial teacher training in England: plotting a principled pedagogical path through a changing landscape. *Professional development in education, 42*(4), 511-526.
- Khader, F. R. (2012). Teachers' pedagogical beliefs and actual classroom practices in social studies instruction. *American international journal of contemporary research, 2*(1), 73-92.
- King Thorius, K. A., Maxcy, B. D., Macey, E., & Cox, A. (2014). A critical practice analysis of response to intervention appropriation in an urban school. *Remedial and Special Education, 35*(5), 287-299.
- Maksimović, J., Osmanović, J., & Stošić, L. (2018). Teachers as reflective practitioners with the function of improving educational practice in primary schools in Serbia. *Journal of Contemporary Educational Studies/Sodobna Pedagogika, 69*(4), 306-324.
- Mansour, N. (2008). Science Teachers' Beliefs and Practices: Issues, Implications and Research Agenda. *International Journal of Environmental & Science Education, 4*(1), 25-48.
- Mashford-Pringle, A., & Nardozi, A. G. (2013). Aboriginal knowledge infusion in initial teacher education at the Ontario Institute for Studies in Education at the University of Toronto. *The International Indigenous Policy Journal, 4*(4), 1-19.
- McChesney, K., & Aldridge, J. M. (2019). A review of practitioner-led evaluation of teacher professional development. *Professional development in education, 45*(2), 307-324.
- McChesney, K., & Aldridge, J. M. (2019). A review of practitioner-led evaluation of teacher professional development. *Professional development in education, 45*(2), 307-324.
- Pajares, M. F. (1992). Teachers beliefs and teaching research: Cleaning up a messy construct. *Review of Teaching Research, 62*, 307-332.
- Richards, J. C. (1998). *Beyond training: Perspectives on language teacher education*. Cambridge University Press.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. *Handbook of research on teacher education, 2*(102-119), 273-290.
- Shinde, M. B., & Karekatti, T. K. (2012). Pre-Service Teachers' Beliefs about Teaching English to Primary School Children. *Online Submission, 5*(1), 69-86.
- Yell, M. L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What a long, strange trip it's been!. *Remedial and special education, 19*(4), 219-228.