

Impact of Induction Training on Pedagogical Skills and Classroom Practices of Elementary School Teachers in Punjab

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Abstract

The targets of quality education can be achieved through the efficient and trained workforce responsible for delivery of education. The study was conducted to investigate the impact of induction training on pedagogical skills and classroom practices of elementary school teachers in Punjab. Twenty teachers who were inducted in 2018 and gone through induction training were selected through convenience sampling to participate in this study. An observational protocol was developed to observe them teaching in their real time classrooms. Descriptive data indicated that newly inducted teachers didn't show significant improvement in the pedagogical skills and classroom practices due to their participation induction level training. The skills, if any, they are applying are being used unknowingly and with least effect on the students. So, it can be concluded that the induction trainings offered by QAED have no greater impact on improving pedagogical skills of the newly inducted teachers. It is strongly recommended that these teachers should be followed by the training academy for first few years so that the impact of induction trainings can be made visibly significant.

Keywords: Effectiveness, Induction training, Teaching and learning, Pedagogical skills

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Introduction

Quality education is the top most priority for all nations especially for developing countries to ensure their prosperity in future. The education system of any nation is desired to be developed and flourished with the sole aim of provision of quality education to students; it is directly linked with teaching quality. To fulfill this need, professional development of teachers is mandatory which is usually done through offering trainings to them. It is important to remember what type of characteristics we want to develop in our teachers keeping in view our present and future needs? What should be the quality of teacher training? How can the quality and its impact be measured?

Training outcomes must include getting knowledge about concepts, developing specific necessary skills and resultantly improving teaching methodologies as a whole. The idea of quality in teaching is one of the important components that largely affect students' learning. It is very evident that teaching quality does not increase over a short period of time (Wiswall, 2013). According to Rowe (2003) quality of teaching has remarkable effects upon student 'experiences on understanding' and achieving desired learning targets. Quality of teaching, therefore, is a very important consideration for discussion while we talk about quality of education (Koedel, Parsons, Podgursky & Ehlert, 2015).

Furthermore, as objectives of teaching change, quality teaching definitely changes its perspective. For example, for those who think students' scores as a quality indicator limit their perspective to achieving students marks as an indicator of teachers' quality. It has wide acceptance that many indicators involve in the quality of teachers. For example, Goe, Bell and Little (2008) said that different indicators of teacher quality are checking ability, qualifications, classroom teaching, student outcomes, and understanding of educational rules and regulations. Darling-Hammond (2000) reviewed research on the quality of teacher and introduced five ways for the improvement of teacher training and pupil learning outcomes such as general academic ability, content knowledge, teachers' curriculum and syllabus, teaching experience and certification. In line with this issue, teacher quality is the combination of many characteristics e.g. qualification, physical appearance, pedagogical skills, classroom practice and adoption of modern ways to support students (Yoon, 2017).

Teacher training has a significant role in producing quality teachers. Trainings are offered to them at different stages of their career. One of the well-known trainings is the training they receive right at the start of their career i.e. the induction training. A well-design induction training program assumes that understanding the school settings is most important for the novice teachers. For a new teacher it is difficult to learn all areas at a time, so focusing on an important component which will be directly linked with teaching and learning and classroom practices, lesson planning, teaching techniques, classroom management, interaction with students during lesson, content knowledge, and

assessment are some of the areas to be included in the induction trainings for novice teachers. It requires extra time and effort to command over content. Newly inducted teachers can start to comprehend how things can be linked, acceptance expands while discussions are planned to solve the issues (Darling-Hammond, Lisa, Channa, & Brigid, 2020). A comprehensive training program before joining the real classroom activities to address most immediate needs in classroom teaching is strongly recommended across the globe i.e. induction level training. Induction training helps newly inducted teachers to become oriented to a new environment. New teachers are joining with rich content knowledge but still we fail to achieve quality education because they have lack of practical skills and command over effective teaching techniques. This training helps teachers to understand students, teaching techniques and ways to deliver, awareness about systems and processes, as well as school rules and regulation are basic for teachers to settle in and feel confident. It is supposed that these novice teachers are going to become a lifelong learner (Thompson, 2018). After training, teachers are equipped with the skills to better respond to analyze difficult situations. According to Darling-Hammond and Baratz-Snowden (2007), there are number of components of these training such as:

- Basic subject knowledge; information learning, instructional method, evaluation, learning in practical situation
- Well defined standards of practice used to monitor the strategy and assessment of course and experimental work; drawn-out practical skills (at least 24 weeks) which are connected with syllabus and practice in real classroom.
- relationships among training institutes and schools that demand what type of teacher required
- Methods of case-study, instructor research, assessments techniques, and portfolio examinations that relate teachers' learning to classroom practice.

They further stated that novice teachers must improve their practices, understanding about teaching and learning, and must be able to express these practices. Along with imitating teaching methods on self-reflection, all the new knowledge that teachers receive from participation in training helps them to enhance their skills such as improving outcomes, learn handling in all kinds of situations, etc. content knowledge is another very important part that is linked with training and effective classroom teaching. Subject matter tests of the teachers (NTE) have explained no reliable association between this measure of content knowledge and teacher performance as measured by student outcomes. Most studies show small, statistically insignificant relationships, both positive and negative.

It is a crucial practice to provide quality feedback for the achievement of high productivity and effectiveness of the trainings (Darling-Hammond 2012). This is the core learning which a teacher wishes to bring on before getting into their real

classrooms, i.e. the expert teachers carry out in the school environment, as part of their teaching profession (Schaaf, 2019). Basic practices emphasize on the importance of teacher's content knowledge and achievement (Zeichner 2012). The best practices aim to endorse teachers' routine activities and to help them with rich content, and meaningful teaching support (McDonald, Kazemi, Kavanagh 2013). Crucial activities may be classified as: (i) activities before the lesson to fix learning tasks and activities (ii) plan activities for the lesson for coaching, controlling and evaluating and (iii) post-lesson activities in the form of teaching reflection. It seems difficult to measure on single measurement tool which involves fully interacting with students in different settings and teachers' classroom teaching. As an alternative, various kinds of measurement tools are needed to measure teachers' professional development (Maulana & Helms-Lorenz, 2016). To some extent, little is thought about the proof that is accommodated the utilization of estimation instruments as far as validity, trustworthy, usefulness just as the effect they would have on teachers' turn of events. Knowledge in this point is dire to more likely ground choices concerning to the estimation of instructors' practices and related results, for example, accepting help or getting advanced.

Effective training promotes quality education, which in turn enable a student for lifetime learning and success. The meaning of effective training helps to ensure classroom teaching which emphasized to the motivation on improving quality, planning, and assessment of teachers as measure of modern education developments aiming student achievement (Jamil, 2013; Pianta, 2016). These reforms are directly linked with teachers' classroom practices; there is a need for observation tools that can be used to observe teacher after induction program (MET Project, 2012). Teachers' induction training and professional development that surely result in upgraded student achievement and measuring the effectiveness of the induction program. For many years ago, newly inducted teachers were prepared with other teachers by observing teachers' classrooms practices. However, there have not been various activities to clearly describe, operationalize, and measure this aptitude to survey how instructors see classrooms, and development effective teaching through observation (Star, Lynch & Perova, 2011).

The main elements of an effective induction program are being prepared training clearly through the goals and objectives according to the needs of teachers and students (Nihal & Mehtap, 2016). Measuring impact of induction training on pedagogical skill on classroom practices is a good strategy. An important skill for an effective teacher is to facilitate learning and student achievement, although most beginning teachers have not mastered these skills. The most important skill for an extraordinary teacher is to motivate learning and student success (Lambeth, 2012). The induction mechanisms increase the ability and skill development of newly inducted teachers. It is said that earlier by Tanzi, Bush & Moir, 1999). The expectation from new teacher begins after very next day of training which is quite unnatural. There is a necessary continuous support from school

heads, senior mentors and observers from training academy, and proper feedback. A critical advantage of induction program support is that it gives framework to involve students well with positive direction (Mansor et al., 2012). As indicated by Portner (2005), “New educators utilize a mixture of practical instructing methods that they gain from the induction training deployment program”.

Currently, the various types of the learning taking place, but do not highlight the quality of the teacher training only offers some insight into the quality of learning, neither does suggest any indicators for improving quality. Then it is more practicable to ensure the trainer apply methods based on classroom activities, with lesson observations. It can be more effective to interview the teachers and head teacher for applicability of these tools in classroom. Classroom has three wide-ranges: expressive support, classroom organization, and instructional support. The classroom observation tool can be used to evaluate classroom quality for both research purposes and as a tool to help new and experienced teachers to become more effective (Wim, Grift, Houtveen & Hurk, 2019).

Feedback after classroom observation is valuable which may cover content delivery, pedagogy, and interaction with a student, through questioning techniques and encourages participation. Supporting the learning aids, or knowledge and understanding of one’s own intellectual developments by asking a question during teaching, it is a significant element of feedback and is essential for. In addition, support, in which observer in a determination to extend students’ understanding, has been related to improve linguistic, social development and academic performance (Faiza, Sabol, Hamre & Pianta, 2015).

Keeping in view the effectiveness of observing the teachers in real classrooms to measure the impact of the received training, this study also used classroom observations to investigate the impact of induction level training of the elementary school teachers in Punjab. The main objective of the study was to find out the impact of induction training of novice teachers’ pedagogical skills and classroom practices over an extended period of time.

Research Questions

The following research questions were set to direct our study:

1. How has induction training of elementary school teachers impact teachers’ lesson planning skills and practices?
2. To what extent, are novice elementary school teachers practicing teaching methodologies they had learnt during induction level training?
3. What kind of classroom management techniques and assessment techniques are being used by newly inducted elementary school teachers in Punjab?
4. How students are behaved in the classroom by the newly inducted elementary school teachers?

5. To what extent, newly inducted elementary school teachers in Punjab have mastery in the content knowledge they are teaching?

Methodology

The study was descriptive in nature. The study targeted the newly inducted elementary school teachers for investigating role of their induction training on pedagogical skills and classroom practices of elementary schools in Punjab. As real-time classroom observation is considered the best tool to measure teachers' teaching skills and practices, this study also used observation protocol to collect the data. Thus, this study may be categorized as descriptive qualitative research. All elementary school teachers who got induction level training in 2018 were considered as the population of the study. Multistage sampling was used to select the sample. Twenty teachers were taken as the sample for the study from four districts of the province i.e. Mianwali, Lahore, Sargodha, and Bahawalpur. Multi-stage random sampling technique was used to select the sample from the population.

The study aimed to measure impact of the induction on pedagogical skills on classroom practices of elementary schools in Punjab. For this purpose, the researcher herself developed classroom observation protocol keeping in view the main areas of the training. The protocol consisted on 30 items and 6 factors. Validity of classroom observation tool was ensured by accessing three experts of University of Education and Allama Iqbal Open University. After data collection the analysis for classroom observation tool was applied by using statistical analysis. SPSS software will be used to analyze the data. Descriptive statistics were used to analyze the data. Frequency distribution was used to analyze the targeted pedagogical skills and classroom practices respondents.

Results

Table 1
Lesson Planning

No.	Statements	Frequency				Mean	SD
		Not at all	Least Effective	Satisfactory	Very Effective		
1	Lesson was planned	8 (30.8%)	6 (23.1%)	4 (15.4%)	2 (7.7%)	1.00	1.03
2	Overview Previous lesson given	5(19.2)	9 (23.1%)	6 (12.5%)	0 %	1.05	0.76
3	Defined Los	2(7.7)	8 (30.8%)	8 (30.8%)	2 (7.7%)	1.50	0.83
4	Linkage between precious lesson	2(7.7)	8 (30.8%)	9 (34.6%)	1 (3.8%)	1.45	0.76

5	Important point summarize	6 (23.1%)	3 (11.5%)	6 (23.1%)	4 (15.4%)	1.55	1.28
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It was found during observation sessions that 30.8% teachers did not prepare and use lesson plans. Some of teachers (about 23.1%) start their lessons from an overview of previous lesson. Almost one-third (30.8%) of the trained teachers satisfactorily defined learning outcomes before teaching. It was observed that about 34.3% trained teachers relate their lessons with pervious lessons while about 23.1% trained teachers summarized major points of the lessons.

Table 2
Teaching Techniques

No.	Statements	Frequency					
		Not at all	Least Effective	Satisfactory	Very Effective	Mean	SD
1	Voice quality of the teachers	0%	1 (3.8%)	9 (34.6)	10 (38.5%)	2.45	.604
2	Eye contact with Students	0%	5 (19.2%)	10 (38.5%)	5 (19.2%)	2.00	.502
3	critical thinking was created	12 (46.2%)	0%	0%	8 (30.8%)	.400	.688
4	Time was managed during activities	1 (3.8%)	9 (34.6%)	9 (34.6%)	1 (3.8%)	1.50	1.02
5	AV aids were used	8 (30.8%)	8 (30.8%)	3 (11.5%)	1 (3.8%)	.900	1.02
6	various teaching strategies were used	9 (34.6%)	5 (19.2%)	4 (15.0%)	2 (7.7%)	.950	1.05

Table 2 shows that it was found during classroom observations that about 38.5% trained teachers usually have good voice for teaching. Most of the teachers maintain eye-contact with students. About 46% teachers didn't try to promote critical thinking among the students. In majority of the cases, time was not properly managed to optimize teaching-learning activities. AV aids were used but did not align with the requirements of the lesson so resultantly least effective. Similarly, a significant number of teachers were not using a variety of various teaching strategies to cater the needs of all the students.

Table 3
Classroom Management

No	Statements	Frequency					
		Not at all	Least Effective	Satisfactory	Very Effective	Mean	SD

12	Seating arrangement was based on equity	1 (3.8%)	1 (3.8%)	8 (30.8%)	10 (38.5%)	2.35	0.81
13	Class was started on time	1 (3.8%)	6 (23.1%)	10 (38.5%)	3 (11.5%)	1.75	0.79
14	Peaceful environment of classroom	2 (7.7%)	4 (15.4%)	13(50%)	1 (3.8%)	1.65	0.75
15	Classroom management techniques were used	8 (30.8%)	8(30.8%)	1 (3.8%)	3 (11.5%)	0.95	1.05
16	Relevant examples were given during lesson	4 (15.4%)	7 (26.9%)	7 (26.9%)	2 (7.7%)	1.35	0.93

It was observed that about 38% teachers had proper seating arrangement for the students; half of the teachers were offering a peaceful classroom environment; 30% of teachers did not show any planned classroom management technique, while further 30% who tried to apply were doing in a least effective way. About one-fourth of the teachers gave relevant real-life examples to explain their lessons but only 3.8% of teachers start their classes on time.

Table 4

Assessment Techniques

No	Statements	Frequency				Mean	SD
		Not all	at Least Effective	Satisfactory	Very Effective		
17	Students' understanding was checked through questions	10 (38.5%)	5 (19.2%)	3 (25.0%)	1 (3.8%)	0.90	1.17
18	Students were helped in homework	14 (53.8%)	4 (15.4%)	1 (3.8%)	1 (3.8%)	0.45	0.83
19	Formative assessment for learning	6 (23.1%)	8 (30.8%)	5 (19.2%)	1 (3.8%)	1.10	1.02
20	Proper feedback	15 (57.7%)	1 (3.8%)	2 (7.7%)	1 (3.8%)	.65	1.35
21	Assessment at the end of the lesson	5 (19.2%)	1 (3.8%)	8 (30.8%)	1 (3.8%)	1.85	1.34

It was observed that 38.5% of the teacher did not ask relevant questions to monitor students understanding. Majority of the teachers (53.8%) did not helped weak students in homework. Almost one-third (30.8%) use formative assessment to enhance students understanding in a least effective way. While majority (57.7 %) of the teachers were not at all providing feedback on written work. Test, etc. Whereas, 30.8% asked questions at the end of the lesson

Table 5

Interaction with students during lesson

No	Statements	Frequency				Mean	SD
		Not at all	Least Effective	Satisfactory	Very Effective		
22	Students were encouraged to ask questions	5 (19.2%)	7 (26.9%)	7 (26.9%)	1 (3.8%)	1.20	0.89
23	Students were engaged in activities	1 (3.8%)	13 (50.0%)	1 (3.8%)	1 (3.8%)	1.40	0.88
24	Response time given to student	9 (34.6%)	4 (15.4%)	4 (15.4%)	3 (11.5%)	1.30	0.98
25	Tolerance / respect promoted in classroom	0%	5 (19.2%)	10 (35.5%)	5 (19.2%)	2.00	0.73
26	Students were called politely	0%	7 (26.9%)	10 (35.5%)	3 (11.5%)	1.80	0.70

It was found that almost half of the teachers either didn't encourage the students to ask questions or done it with least impact. Only one teacher was effectively engaging the students in activities. Amazingly, about 34% teachers of the teachers were not giving response time at all to students. Slightly more than half of the teachers were satisfactorily or effectively promoting tolerance and respect among students during their lessons. Furthermore, the students were addressed politely.

Table 6

Content Knowledge

No	Statements	Frequency				Mean	SD
		Not at all	Least Effective	Satisfactory	Very Effective		
27	Command over the content	6 (23.1%)	9 (34.6%)	4 (15.4%)	1 (3.8%)	2.00	0.86

28	Content delivery was based on students' age	2 (7.7%)	13 (50.5%)	4 (15.4%)	1 (3.8%)	2.20	0.70
29	Material / activities appropriate to students' level	1 (3.8%)	5 (19.2%)	12 (46.2%)	2 (7.7%)	1.75	0.72
30	Useful helping material other than textbook	10 (38.5%)	7 (29.9%)	2 (7.7%)	1 (3.8%)	0.70	0.86

During classroom observations, it was found that more than half of the teachers were unable to show full command over the subject matter. Half of the teachers presented content according to the age of students. Trained teachers 46.2% satisfactorily presented content knowledge appropriate to students' level. But majority of the teachers didn't support their teaching from other helpful sources other than the textbooks.

Discussion

The study was planned to investigate the impact of induction training on pedagogical skill and classroom practices of elementary school teachers in Punjab. The findings of the study show some positive impact of induction level training on few areas of pedagogical skill and classroom practices of the teachers. Six important areas of the said training i.e. lesson planning, teaching technique, classroom management, assessment technique, interaction with students during lesson, and content knowledge were focused in this study. The practices of the teachers were measured through classroom observations.

Regarding the first area i.e. lesson planning, the study found that majority of the newly inducted teachers do not plan their lessons at least in writing. Most of teachers give an overview of previous lessons; majority of the teachers define learning outcomes at the start of the lesson. It was observed that 30% of the teachers define learning outcomes and 23% of teachers sum up this lesson. The results of the present study were to a great extent compatible with those which found that the lesson plan is believed that the most important part of the lesson plan relate to teachers' behaviors rather than their teaching methods. Lesson planning is considered necessary but due to heavy workload and lack of knowledge, mostly teachers do not pay any heed on this aspect (Jamali & Heidari, 2014). It was further found regarding the second identified area i.e. teaching technique that about 38.5% trained teachers usually have good quality voice for teaching. Most of the teachers maintained eye contact with students. But majority teachers do not pay special attention on promoting critical thinking of their students. Many teacher managed time of activities. Similarly, almost 34 % of teachers do not apply multiple teaching techniques to encourage all the students in the class. The findings of this research are in line with earlier researches which concluded that in majority of cases, teachers have reasonably

good eye contact with the students and possess the speaking skills. There is initially a need to make a classroom well-managed, which can be sustained and perhaps enriched through the means of induction training (Lars-Erik, Hazel, Katharine, Trevor, & Helen, 2010).

In classroom management area, it was observed that the teachers were able to make a seating plan for the students which were based on equity; classroom environment was peaceful; gave relevant examples during lesson about few teachers started classes on time. Supervision of a classroom, determining what skills and knowledge will be imparted to the student, planning lessons and executing them successfully, correctly measuring student knowledge, and modifying to student requirements are the guiding parameters for classroom management. The newly inducted teachers need support after completion of induction training to provide the quality knowledge because class is a part of community where students needed: demonstrative support, positive learning. It is necessary to develop comprehensive class observation tool who must measure classroom quality for both purpose to check training effectiveness and as a tool to help newly inducted teaching practiced to made teaching more effective (van der Grift, Houtveen, & Hurk, 2019).

The observation regarding assessment area found that 38% of the teachers asked relevant questions to enhance students' learning; but majority (50%) did not help their students in homework while 57 % did not provide feedback on written work etc. According to Burns, De Gregori and Taut (2016), good teacher must emphasize on student's independence for asking thought-provoking questions and providing productive feedback on work.

As far as the fifth area i.e. interaction with students was concerned, some teachers encouraged students to ask questions. Majority (50.5%) of the trained teachers usually engaged students in activities. About 35% teachers promoted tolerance and respect among students. About 33 % teachers usually did not give response time to students after asking questions. Almost 33% teachers called their students politely. As earlier result is supporting that the teacher establishing a supportive plan for classroom norms, rules; they create a temperament and assign duty for many of activities in the classroom that teacher's strength then do them and progresses in classroom environment, learning time, and productive learning student achievement processes that can finally increase quality (Darling-Hammond, Lisa, Channa, & Brigid, 2020). Almost all teachers called their students politely in the class, with respect.

The last and important component is content knowledge it is found that majority 34% trained teachers have not command on their content knowledge. Majority of the teachers (about 50%) presented content according to age of students. Trained teachers 43.8% presented content knowledge appropriate to students' level. After getting training mostly trained teachers not using any helping material for teaching and learning. Trained

teachers are highly qualified but still having not command over content knowledge appropriate to students' level. Mostly teachers are not using any resources other than textbook for teaching and learning. Moreover, it is depended the criteria of selection of teacher and staffing. Teachers will be able to shift from novice to professional thinking about teaching technique if they have command over content knowledge (Darling-Hammond & Baratz-Snowden, 2007) under the light of above discussion it is found that mostly institutions now preparing the new teachers and thinking that the induction training is compulsory, they provide a platform to the teachers in advance for their success. To sustenance professional development and to evaluate Teaching pedagogical and classroom practices of the teachers after training, classroom observations are one of the most common tools, all classroom activities can be measured through this tool comprehensively (Hora & Ferrare, 2013).

Conclusions

It is concluded that the induction training of the elementary school teachers offered by QAED is not as effective as it should be. Further, it is also concluded that skills obtained by the newly inducted teachers need to conform in real classroom practices to ensure the effectiveness of the induction training. Although teachers are applying some learned techniques in their classroom practices but still there are some areas which need support after training e.g. lesson planning and pedagogical skills, assessment techniques, etc.

Recommendations

It is proposed that more budgets provided to the training institutions for enhancing the training standard. Head Teachers support and feedback should be provided. Assign a senior as mentor to overcome difficulties during classroom teaching. At least six month training program can be offered to inductees two months in academy for teaching content and learning pedagogical skills and fours month practices in real class room environment. Training need was address and Relevancy of content and practices should need to address properly, training effectiveness for teacher adjustment in school. Feedback by head teachers and training academy provided at least for one year for sustainability of teacher training.

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