



RESEARCH PAPER

Impact of Head-teachers' Instructional Approaches on Teachers competencies at Campus Schools in Karachi

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ABSTRACT

The purpose of this study is to investigate teachers' perceptions of head-teachers' instructional approaches and its impact on teachers' competencies at campus schools in Karachi, since lack of teacher competencies has been a substantial issue, as it has remained ineffective teaching, which affects students' academic achievement. Achieving the research objectives a quantitative research design with a survey technique was used. Five hundred twenty-five respondents were selected by a convenience sampling, and finally 470 teachers' data founded correct for analysis after screening, with a 90% response rate. The Smart PLS was utilized for calculations, reliability, validity and hypothesis testing, and descriptive analysis was done through SPSS. The results revealed that the perceptions of campus school teachers regarding their heads instructional approaches, as an instructional resources provider, feedback on teaching and learning, and visible presence have a significant and substantial effect on teacher competencies. It is suggested that school leaders should employ and include instructional approaches such as instructional resources provider, feedback on teaching and learning, and visible presence to improve their teachers' competencies.

Introduction

Teachers are the cornerstone of the educational pyramid, and if they do not receive enough training, the system maybe sub-par of its potential (NEP, 2017; & NEPF, 2018). Campus schools in Sindh, Pakistan, are woefully under-managed and under-led. The primary reason is that the campus school teachers are working ineffectively and unable to produce productive students (Ahmad, Ali, & Sewani, 2021; Bashir & Khalil, 2017; Gulistan, 2015). According to previous researches, teachers must

maintain and expand their skills, for quality learning to serve their students' needs accordingly. However, these teacher competencies necessitate a significant investment of time and money from school authorities that offer the necessary resources (Jacob, Hill, & Corey, 2017; Lee & Kim, 2016). By means of this, it is critical to pick a subject matter that will lead to beneficial outcomes for competencies of teachers. Various situations influence teachers' competencies, and it is very difficult to measure it (Justi & Van Driel, 2006). It's well known that structural factors influence how well teachers teach and learn. Lack of resources in schools, organizational interest and cultural practices also affect the competencies of teachers (Kershner, Pedder, & Doddington, 2013). According to numerous studies, school heads have a significant impact on the professional development/teachers competencies of their faculty members and their preparation for effective classroom teaching. Therefore, heads of campus school must support, promote, and appreciate faculty members who take the initiative to participate in teachers competencies (Ahmad et al., 2021; Goldsmith, Doerr, & Lewis, 2014; Lachance & Confrey, 2003). When it comes to overcoming today's difficulties of growing campus school teachers' capacity and competencies, the head teacher's position as an instructional leader is critical (Ahmad, Thomas & Hamid, 2020; Ahmad et al., 2021; Huggins, Klar, & Andreoli, 2020; Niqab, Sharma, Wei, & Maulod, 2014). In previous studies, it was founded that instructional leadership has a significant impact on teachers' competencies and students' learning. Past studies recommended that researchers must investigate instructional approaches and their effects on teachers' competencies in various contexts. Therefore, the researchers of this study keen to find the impact of instructional approaches of campus school heads on teachers' competencies.

Literature Review

Teacher Competencies

Essentially, it can be defined as an activities that assist teachers in improving their knowledge, skills, and attitudes toward teaching (Postholm, 2012). Teacher competencies has been identified for enhancing teachers' attitudes and behaviours, student learning, and the adoption of educational policies in several school reform initiatives substantially (Babinski, Amendum, Knotek, Sánchez, & Malone, 2018; Kim & Lee, 2020).

Instructional Approaches

Educational instructional approaches of head teachers play a vital and effective role to enhance teacher's capabilities at school level. Teachers' instructional techniques are inspired by competent guidance which provided by school heads to improve teaching capabilities (Ahmad et al., 2021; Ahmad et al., 2020; Kraft, Papay, Johnson, Charner-Laird, & Reinhorn, 2015; Hallinger, 2005).

Instructional Leadership Model

Acknowledging the importance of instructional approaches in the classroom, the researchers used a model (Akram, Kiran & İLGAN, 2017) with seven dimensions:

1. The school leader's role as a provider of instructional resources
2. Feedback on teaching and learning
3. Visible presence
4. Teacher competencies
5. Curriculum Implementer
6. Monitoring students' progress
7. Protecting instructional time

These dimensions might be interpreted as instructional approaches that assist teachers in developing their competencies. Finally, as instructional leaders, head-teachers cultivate a positive learning environment in their schools that motivates and inspires students and ensures that teachers' competencies and learning programs are maintained and improved (Zheng, Yin, & Li, 2019). Akram et al., (2017) stated that education leadership is divided into the following dimensions: the school leader's role as an educational resource provider, feedback on teaching and learning, a visible presence on the school grounds, and the teacher's competencies were used in this research.

Dimensions of Instructional Leadership

Among the elements impacting teachers' skills were the characteristics of instructional leadership as follows:

1. School head as an instructional resources provider
2. Feedback on teaching and learning
3. The visible presence of the school head as a leader

A development is necessary in teaching learning, which comprise expertise, abilities, and values that assist instructors in meeting their professional objectives, tracking and evaluating student achievement and educational outcomes. (Akram & Zepeda, 2015; Akram, 2019; Suleman, Aslam, Sarwar, Shakir, & Hussain, 2011)

Campus School head-teacher as an instructional resources provider and teacher's competencies

Liu and Hallinger (2018) investigated the impact of school heads instructional leadership on teacher professional learning at middle schools in China using the PIMRS tool (Hallinger & Murphy, 2013). They discovered that offering professional development by school heads had a moderate benefits on the professional learning and effectiveness of teachers. Additionally, teachers' functional competency across the 21st century in Malaysia was examined by (Ismail, Mansor, Iksan & Nor, 2018), who discovered that instructional leaders' practices as an instructional resources provider have a significant and positive relationship with teacher competencies at school level, they proposed that instructional leadership offered by school heads has a substantial impact on teachers' skills in secondary schools, particularly in urban areas.

Ahmad et al., (2021) investigated the effect of instructional leadership on teachers' professional competencies at the secondary level in Karachi, Pakistan. They discovered that school heads' instructional leadership helps them to improve their teaching skills and abilities, and they have positive and significant effect on teachers professional competencies.

Using the Hallinger and Murphy (2013) model, (Ismail et al., 2018) investigated the influence of school heads instructional leadership on science teaching competencies in Malaysia at the secondary school level and discovered that instructional leaders who practice as resources provider have a significant impact on science teachers' teaching competencies. As a result, hypothesis 1 of the current study was validated by the review of the literature.

H₁: The campus school heads' instructional approach as resources provider has a significant positive effect on teacher's competencies.

Campus School heads feedback on teaching learning and teacher's competencies

Feedback on teaching and learning means being visible throughout the school, giving praise and feedback to teachers about classroom and professional growth activities, giving credit and feedback to learners about classroom behaviours, and ensuring uninterrupted instructional time are all examples of heads feedback (Glickman, Gordon, & Ross-Gordon, 2001). This aspect in the instructional leadership model has been referred to as collaborative school heads in the education and learning process.

It is assumed that the school heads can be considered an instructional leader and one of the motivating factors for good teaching and learning (Tice, 1992; Weber, 1996). The literature emphasizes the importance of the school heads being involved in the checking and receiving of comments. Following that, identifying learning requirements through discussion of instructional issues, examining classroom learning process. It is also providing criticism on their perceptions as a method of providing and enabling best instructional approaches, and giving and supporting

change through governmental and non - governmental appreciation are all factors to consider (Akram et al., 2017).

The school heads job in providing feedback on teaching and learning comprises providing input to both teachers and students (Leithwood, Harris, & Hopkins, 2020). Improving teaching and learning has remained the most critical challenge for head-teachers, responsible for managing the instructional program as the school's leader. As an instructional leader, the school head organizes professional competencies and support for teachers (Ali, 2017).

The link between instructional leadership and teachers' functional abilities was measured in Malaysia using the instructional leadership paradigm at the primary and secondary school levels (Hallinger & Murphy, 1985). At the primary and secondary school levels, instructional leadership methods such as feedback on teaching and learning and measuring student achievement demonstrated a significant and beneficial effect on teacher competencies (Ismail et al., 2018). The research revealed that head teacher's instructional leadership approach like feedback on teaching and learning has a positive impact on teacher competencies. Thus, the past empirical studies encouraged to formulate H₂ for the current study.

H₂: The campus school heads' instructional approach as feedback on teaching and learning has a significant positive effect on teacher competencies.

Campus School heads instructional approach as visible presence and teacher's competencies

The school head has a crucial part to organize school activities, therefore it can be considered as an important element of the school (Andrews & Soder, 1987). Maintaining a visible presence to supervise and assess instructions is compatible with this dimension. The exercises that contain a connection between the school heads as an administrator, school employees, and students concerning classroom improvement for directing and assessing guidelines (Hallinger & Chen, 2015).

Successful instructional leaders must show a visible presence, focusing on learning objectives, presenting learning practices, detailing programs and exercises on timeline. As an instructional leader, he or she must spend more than a half-day focusing on administrative goals (Whitaker, 1997).

Whitaker (1997) noted that school heads visibility as one of the essential component, commonly disregarded in a school's life. As an instructional leader, the school's head maintains a visible presence in the classroom, ensuring that the school's functions run smoothly. A competent head as an instructional leader maintains high visibility across campus and in classrooms to keep frequent interaction with students and teachers. As instructional leaders, they regularly schedule professional assistance and development for teachers (Ali, 2017; Craig, 2017).

The instructional leadership approaches of secondary school head, which maintain a visible presence was significant and positive impact on teacher competencies (Ismail et al., 2018). According to a prior studies, the function of heads in demonstrating visual presence has a substantial impact on teachers' abilities and their professional growth. These studies demonstrated a considerable, and favourable influence of head teachers' instructional leadership approach on teacher competencies as evident in the school context, which prompted the formulation of H3 for the current study.

H₃: The campus school heads' instructional approach for visible presence has a significant positive effect on teacher competencies.

Conceptual Framework

The conceptual framework shows, how campus school heads' instructional approaches as a school leader, instructional resource provider, feedback on teaching and learning, and visible presence directly effects on teachers' competencies.

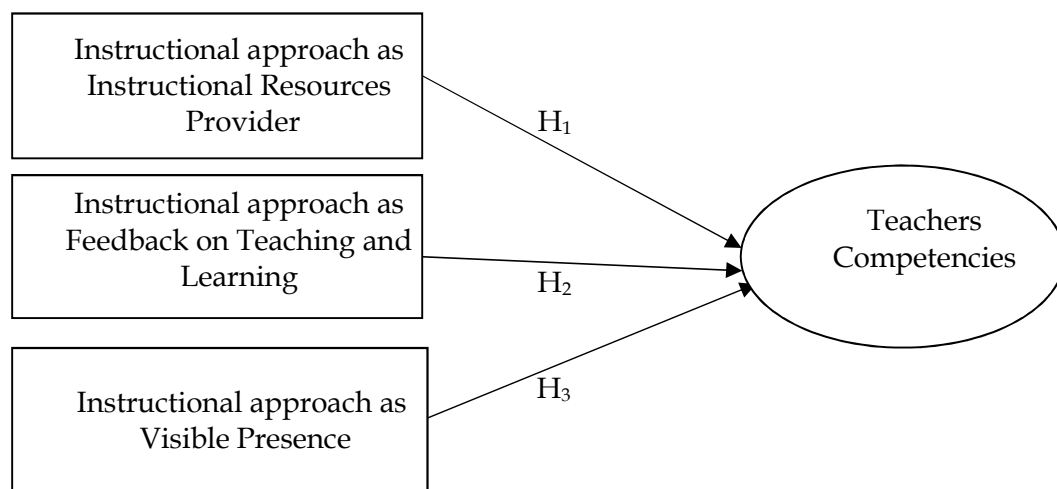


Figure 1: Conceptual Framework Adapted from: (Akram et al., 2017)

Methodology

A quantitative research design was employed to examine, the perceptions of campus school teachers about their school heads instructional approaches and its effect on their teaching competencies.

Sample and Data Collection

The current study's target population was all campus school teachers of Karachi, Pakistan. Because of its heterogeneous population and representation of both urban and rural locations, Karachi campus schools were selected. Five hundred twenty-five survey questionnaires were sent to teachers working in campus schools

in Karachi using a convenience sampling technique. 475 questionnaires were returned, with a response rate of 90%, five survey forms were found incomplete and excluded after data screening. A total of 470 survey forms were included in the final dataset, which was used for final analysis.

Instrumentation

Instructional Leadership Questionnaire (ILQ)

After obtaining permission from the author, the instructional leadership questionnaire was adapted (Akram et al., 2017). The instructional leadership questionnaire (ILQ) meets the technical reliability and validity standards as a research tool. The items on the instructional leadership questionnaire were divided into four groups in the current study: school leader as an instructional resources provider (IR), feedback on teaching-learning (TL), visible presence (VP), and teachers' competencies (TC). The instrument consists of four variables with 22 items, (IR = 5 items, TL = 5 items, VP = 5 items, and TC = 7 items). Before gathering the main data, the instrument was piloted. Due to low factor loading, construct, and discriminant validity concerns: one from the instructional resources provider and two from visible presence items were deleted. A total of 19 items were used in the main data collection. The instrument sub-sections overall reliability was within acceptable threshold. (Refer to Table 1)

Table 1
Reliability of the internal consistency of the items (ILQ)

Factors	Number of Items	Cronbach's Alpha
IR	04	0.884
VP	03	0.869
TL	05	0.887
TC	07	0.848

Results and Discussion

Demographics profile of the participants

Table 2 provides demographic details of the participants. The table indicates that amongst the total valid sample (n = 470), there were 66.2 percent of females and 33.8 percent of male teachers which participated in this study, and (65.4%) were having master's qualification. A reasonable percentage of teachers (51%) having professional qualifications M.Ed., and holding 1-10 years of teaching experience with the percentage of (61.5%).

Table 2
The Research Demographic details

Demographic with sample size n= 470	Campus School	Frequency (f)	Percentage (%)
teachers			

Gender	Male	159	33.8
	Female	311	66.2
	Total	470	100
Academic Qualification	Graduation	111	23.6
	Masters	307	65.4
	M.Phil.	51	10.8
	PhD	01	0.2
	Total	470	100
Professional Qualification	PTC	29	6.2
	ADE	07	1.5
	B.Ed.	194	41.3
	M.Ed.	240	51.0
	Total	470	100
Teaching Experience	1-10years	289	61.5
	11-20years	101	21.5
	21-30years	42	9.0
	More than 30 years	38	8.0
	Total	470	100

Data Analysis

Hypothetic relationships, validity and reliability were tested using PLS (Ringle, Wende, & Becker, 2015). One of the most advanced statistical methods.

The Measurement Model

Content validity, convergent validity, and discriminant validity were tested to ensure that the outer model's evaluation was valid and consistent. When factor loading is above than 0.7, this showed that significant threshold of the indicators in the model (Hair, Ringle, & Sarstedt, 2011). (See Table 3). Cronbach's alpha represents the lower boundary in terms of internal consistency reliability, while composite reliability (CR) reflects the maximum limit (Hair, Risher, Sarstedt, & Ringle, 2019). Table 4 shows that each variable's alpha and CR values are significant because the threshold value above than 0.7. This signifies that the study's validity and reliability have been proven (Hair et al., 2019). The convergent validity was maintained as long as the factor loadings were significantly discriminated with each other. The average variance extracted (AVE) values were more than 0.5, that showed significant average variance of the items (See Tables 3 and 4).

Table 3
Factor loading

Factor Loadings	IR	VP	TL	TC
IR1	0.822			
IR3	0.865			
IR4	0.888			

IR5	0.810	
VP1		0.859
VP2		0.763
VP3		0.746
TL1		0.843
TL2		0.842
TL3		0.774
TL4		0.843
TL5		0.824
TC1		0.813
TC2		0.843
TC3		0.828
TC4		0.733
TC5		0.859
TC6		0.887
TC7		0.854

IR= Instructional Resources Provider;

VP=Visible Presence;

TL= Feedback on Teaching and Learning;

TC= Teacher Competencies

Table 4
Construct Reliability and Validity

Constructs	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
IR	0.868	0.910	0.717
VP	0.701	0.833	0.625
TL	0.883	0.914	0.682
TC	0.880	0.890	0.670

Three findings were examined to confirm that a set of items might distinguish one factor from others. (1) All items firmly placed against their respective domain (see Table 5), as opposed to cross-loadings of the items in factors, rows, and columns (Fornell & Larcker, 1981); and (2) all values of Heterotrait-Monotrait (HTMT) ratios (see Table 7) are 1 (Henseler, Ringle, & Sarstedt, 2015).

Table 5
Cross Loading and Loadings

Items	Instructional Resources Provider	Visible Presence	Teaching and Learning	Teachers Competencies
IR1	0.822	0.600	0.428	0.605

IR3	0.865	0.662	0.530	0.658
IR4	0.888	0.646	0.596	0.618
IR5	0.810	0.581	0.576	0.518
VP1	0.655	0.859	0.617	0.676
VP2	0.583	0.763	0.423	0.528
VP3	0.428	0.746	0.422	0.513
TL1	0.468	0.511	0.843	0.637
TL2	0.497	0.478	0.842	0.691
TL3	0.499	0.456	0.774	0.532
TL4	0.535	0.570	0.843	0.603
TL5	0.601	0.572	0.824	0.643
TC1	0.647	0.542	0.443	0.813
TC2	0.575	0.570	0.702	0.843
TC3	0.530	0.588	0.588	0.828
TC4	0.558	0.538	0.517	0.733
TC5	0.600	0.670	0.726	0.859
TC6	0.718	0.675	0.701	0.887
TC7	0.652	0.652	0.678	0.854

Table 6
Fornell-Larcker Criterion

IR	IR	TC	TL	VP
IR	0.847			
TC	0.736	0.832		
TL	0.629	0.757	0.826	
VP	0.710	0.731	0.627	0.791

Table 7
Heterotrait-Monotrait Ratio (HTMT)

S. No	Instructional Resources Provider	Teachers Competencies	Teaching and Learning	Visible Presence
IR				
TC	0.820			
TL	0.719	0.823		
VP	0.846	0.835	0.783	

Hypotheses Testing

After analysing the measurement model through running algorithm, the study's suggested hypotheses were assessed through bootstrapping (Ringle et al., 2015). Because it gives greater findings than other covariance-focused techniques, the PLS-SEM methodology was chosen for this study (Hair, Ringle, & Sarstedt, 2013). As shown in Table 8, all aspects of school leadership approaches have a significant and positive effect on teacher competencies, including instructional resources provider

(IR) ($t = 6.891$, $p = 0.000$), feedback on teaching and learning (TL) ($t = 9.130$, $p = 0.000$), and visible presence (VP) ($t = 6.439$, $p = 0.000$). Consequently, the current study's three hypotheses (H1, H2, and H3) were found to be supported. (See table 8)

Table 8
Hypothesis testing results

No	Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (SD)	T Statistics	P Values	f^2	Decision
H1	IR -> TC	0.288	0.288	0.042	6.891	0.000	0.130	Supported
H2	TL -> TC	0.404	0.403	0.044	9.130	0.000	0.311	Supported
H3	VP-> TC	0.273	0.275	0.042	6.439	0.000	0.117	Supported

$P < 0.05$

Predictive Relevance of the Model

The predictive value was evaluated using R-square and cross-validated through Stone Geisser's (1974) Redundancy Q^2 . The coefficient of determination, known as the R-squared value, is an important metric for evaluating through PLS (Hair et al., 2013). Table 9 denoted the value of R^2 is equal to 71.8 and adjusted R^2 is 71.6 values, demonstrating that the current study meets the R-square criteria. To confirm the Cross Validance Redundancy (Q^2) was also investigated (Stone, 1974). The relevance predictive value of $Q^2 = 0.486$ of this study model defined significant. (See Table 9) Effect sizes (f^2) of 0.02, 0.15, and 0.35, according to (Hall & Cohen 1988), suggest modest, moderate, and strong effects, respectively. The effect size f^2 of all instructional approaches is shown in Table 7, indicating that the three instructional approaches utilized in this study had a strong (TL) and moderate (IR and VP) effect on teacher competencies.

Table 9
Predictive relevance of the construct

	R Square	Adjusted R-Square	Q-Square
Teachers Competencies (TC)	0.718	0.716	0.486

Conclusion

The study results revealed that all the three factors, including the school leader's role as a provider of instructional resources, feedback on teaching/learning, and visible presence, had a significant positive impact on teacher competencies. Hypotheses relationships H1, $p=0.000$, H2, $p=0.000$ and H3, $p=0.000$ were accepted. The results of this study are consistent with the previous studies (Ahmad, et al., 2021; Ahmad, et al., 2020; Ali, 2017; Hallinger & Hosseingholizadeh, 2020; Shengnan & Hallinger, 2020). Feedback on Teaching and Learning (TL) had the biggest significant positive effect ($f^2 = 0.311$) in the current study. In contrast, Instructional Resources Provider (IR) and Visible Presence (VP) have a medium impact ($f^2 = 0.130$ and 0.117 , respectively). As a consequence of the findings, campus school heads in Karachi

emphasize pursuing leadership strategies such as increasing student performance and equipping teachers with the necessary teaching skills. In school settings, there is a close link between teaching quality and the effective instructional approaches of school heads. The instructional resource provider strategy used by school heads improves campus school teachers' classroom activities and teaching competencies. Similarly, opportunities for teachers to engage for grooming and enhancing teaching skills and critical activities, ensued student outcomes.

Recommendations

These recommendations are based on the findings of the current study:

- According to the findings of current study, head-teachers instructional approaches as an instructional resources provider has a positive impact on teacher competencies. Therefore, all campus heads must focus on providing instructional resources so that teachers' competencies, student learning, tied to school goals can be improved.
- The current study discovered that the strategy taken by campus school heads in providing feedback on teaching and learning had statistically significant impact on teachers' competencies. So that teachers should be rewarded for their efforts by providing feedback on their classroom teaching and learning in order to improve teacher competences and students' academic success.
- The current study provided reasonable evidence to support the instructional approach of visible presence in the school premises by campus school heads having a significant positive impact on teacher competencies. As a result, the research recommends that campus school heads in Karachi show up in the classrooms and all the school activities regularly, to meet the school's objectives.
- It is recommended that the administration and all the stakeholders must recognize to motivate school heads, provide them smooth environment and necessary resources to incorporate instructional approaches at their campus schools in Karachi that improves teacher competencies, and students learning outcomes.

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