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Exploring the Classroom Teaching Practices of Trained and Untrained Teachers: A Situational Analysis Study for Provision of Streamline to Identify the Natural and Teachable Pedagogical Competencies of Teachers

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Abstract

The study was conducted to explore the classroom teaching practices of trained and untrained teachers. The study was analyzed the pedagogies and pedagogical competencies of trained and untrained teachers used in their classroom teaching practices. The main purpose of the study was to investigate the range of pedagogies and pedagogical competencies of the teachers, which were used in classroom teaching practices both by trained and untrained teachers. The study was helpful for provision of streamline to identify the natural and teachable pedagogical competencies of the teachers. The exploratory sequential mixed method design was used to collect the data. The exploratory sequential mixed method design collects qualitative data first which were followed by quantitative data. For qualitative portion, the content analysis were made from the literature while for quantitative portion the observation on structured check list was used to determine the pedagogies used by trained and untrained teachers in classroom practices. A sample of 208 teachers (104 trained and 104 untrained teachers) was selected from population for quantitative portion of the study. Three consecutive observations were made for each teacher. After analysis the both qualitative and quantitative data, it was found that both trained and untrained teachers were used traditional methods in classroom practices instead of innovative teaching methods and techniques. From the results, it was concluded that both teachers were not aware about innovative teaching methods and competencies. Instead of professional training, the trained teachers' pedagogies and their relevant competencies were ineffective in bringing desired change among students. The result of the study concluded and recommended that there is need to conduct the focused training of the teachers. Focused training comprised on competence-based training. For focused training, teacher trainings must understand the differences in pedagogies and pedagogical competencies of the teachers, which have been obtained (naturally developed) and have not been obtained (Teachable/only developed through training) by teachers.

Keywords: Natural Pedagogical Competencies, Teachable Pedagogical Competencies, Classroom Practices, Trained Teachers, Untrained Teachers

1. Introduction

In order to develop teacher's potential in teaching, teachers' pedagogical competence becomes a matter that needs to be considered and discussed in depth. According to Hustler & McIntyre (1996) pedagogical competencies is based on lesson planning, presentation of lesson in the classroom, management the lesson when it is presented in the classroom, developed learning environment in the classroom, classroom management which leads towards meaningful learning via controlling the behaviors of students and the use of different assessment techniques to assess the students learning. All teacher training institutions are responsible for professional development of teachers and teacher educators to build their professional competence, knowledge and skills. Training institutes must trained the teachers in pedagogies and pedagogical competencies. Moving from simple complex learning styles advised the researcher to elaborate the pedagogy before understanding pedagogical competencies. The pedagogy is the science of teaching and learning. It deals with the laws and theories which explain, guide and direct teachers to adopt the best teaching strategy to deliver to his best capability. It is some time known as the art of teaching children effectively. The word pedagogy literally means science of child. Therefore, the meaning of pedagogy when elaborated becomes the science teaching child-the learner.

The pedagogical competency is defined as a performance, information and teaching skills in the field of teaching and learning (Shulman, 1986). In other words it is a tool of teacher that induce capability in teachers to run the teaching learning proses effectively. The government of Indonesia has defined the phrase pedagogical competence "pedagogical competence as the understanding basic education, students, curriculum development, lesson plan, dialogical teaching and learning process, learning evaluation and potential development of students. The ability of doing well curriculum planning, assessment process, and reflective process in teaching and effective classroom management is also known as pedagogical competence. It is the prime objective of teacher training courses or workshops to equip the prospective teachers with pedagogical competence so that they may implement it during their teaching practices.

According to findings of Stayreva (2013) the teachers are the most influential person in the schools for teaching learning process. The successful implementation of a curriculum depends on the competence of the teacher (Wamala & Seruwagi, 2013). Illanlou and Zand argued that successful execution of any educational plan requires trained teachers who have needful pedagogical competencies for delivery and execution of the plan. The performance of the learners and the quality of their education both are co-related with the quality of the services delivered by the teachers.

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Sultan and Shafi (2014) has defined the pedagogical competencies as specific and prominent characteristics that a teacher should possess in his teaching character role. The pedagogical competencies are divided into three levels of cognition, emotion and practical (Bloom, 1956). A well-trained teacher is one who is familiar with the various thinking skills and know how to implement then in his classroom. He should also be used to applying new teaching and learning technologies in his class. The classroom management requires effective skill of communication with students. The teacher should be robust in evaluation of student's achievements and other personality traits (Ilanluo & Zand, 2011).

According to Prasertcharoensuk, Sompra and Keow (2015) the competencies such as expertise in subject matter, sequence of material presented, organization of the content, exert training into practice, record keeping and feedback are the necessary pedagogical competencies of a good teacher. However, training of teacher with respect to teaching methods, use of educational technology and evaluation should be under focus of training programs.

Prasertcharoensuk et al (2015) has found that the teacher's competency can be predicted from his work on task behavior. The teacher's behavior is an indicator of a successful educational institution. McRae (2012) has concluded in his study in USA that there is a strong relationship between the student's perceptions and the teacher's competence such as teacher's self-efficacy for reading and performance of African, American and European students. However African-American showed more significant response to teacher's level of competence than that of European-American fellows. The teacher's competency was found co-related with self-efficacy.

Typically, the elements of instruction follow the following the scheme of presentation:

i. Lesson planning of teacher- it includes all activities of a teacher that he does before his class starts. For instance, he organizes the concepts into teachable themes and identify goals of the lesson and sets teaching methodology with time management.
ii. Enforcement of teaching planning-application of teaching methods and use of proposed educational technology.
iii. Feedback and reflection

The development of the pedagogical competence requires the professional growth and refinement in the following competencies:

- Development of the plan of instruction
- Identification of technique of teaching suitable for the execution of plan of instruction
- Competency and skill to deliver the instruction
- Amalgamation of content and educational technologies
- Competencies to manage the classroom
- Competencies for effective assessment and evaluation

1.1 Purpose of the study

The main purpose of the study was to explore the classroom teaching practices of trained and untrained teachers. The study investigate the range of pedagogies and pedagogical competencies of the teachers, which were used in classroom teaching practices both by trained and untrained teachers. Basically, the study provide streamline to identify the natural and teachable pedagogical competencies of teachers.

2. Research Methodology

The exploratory sequential mixed method design was used to collect the data. The exploratory sequential mixed method design collects qualitative data first which were followed by quantitative data. For qualitative portion, the content analysis were made from the literature while for quantitative portion the observation on structured check list was used to determine the pedagogies used by trained and untrained teachers in classroom practices. A sample of 208 teachers (104 trained and 104 untrained teachers) was selected from population for quantitative portion of the study. Both male and female teachers were selected for data collection. Three consecutive observations were made for each teacher. Data was collected by the researcher with the help of three observer, who participated directly to collect the data from respondent. After collection the data, the researcher received 619 out of 624 observations from the observers. The data collection ratio was 99.1%. The collected data was analyzed through descriptive statistics i.e. frequency and percentage.

3. Results and Findings

3.1 Content analysis

Punjab Examination Commission (PEC) in its Provincial Assessment of Students' Learning (PASL) (2018-19) report identified the lack of pedagogical competencies in the teachers of the Punjab. PEC (2019) findings highlighted that improved teacher competence in content was not bringing any change in students' performance yet. This report data provide insight to the policy maker to think and realize the importance of pedagogical competence as an important element of teaching.

Shah (2019) identified lack of pedagogical competencies highlighting that pedagogies used in classrooms were ineffective in bringing desired change among students. He emphasized that teachers were unfamiliar to innovative pedagogies and their corresponding competencies. He also emphasized that innovative pedagogies and the relevant competencies would be focused in professional training of teachers.

Pasha et. al. (2019) conducted an online survey and concluded that teachers used lecture method commonly and give preference to this method in the classrooms. Actually, teachers were unfamiliar with relevant teaching competencies

of the pedagogies. They highlighted that there would be a greater need of professional training of teachers in the areas of teaching methods, learning activities, lesson planning and classroom assessments techniques. Particularly, they emphasized a strong need of professional training in innovative teaching methods and techniques.

Gul (2018) highlighted that teachers' training in professional development is the main element to improve the quality of education. In spite of these, our teachers were untrained because there were lack of teachers' training in professional development according to their needs and interest. Any policy aimed at better and improved education could not be successful if the key character i.e. the teachers were not trained and sensitized to the core objectives of teaching and learning for nation building.

Ali (2018) expressed the event history of a symposium organized by Aga Khan University's Institute for Educational Development (IED) with the title "Low Status of Teachers Hurting Pakistan's Education System". One of the speakers identified the common phrase i.e. *those who can't do, teach.* He argued that it was used for teachers and it was the heart of Pakistan's education problems. All the speakers emphasized the low status of teachers in teaching and learning environment. At the end of the event, all the speakers recommended that variety of teachers training would be arranged, and these teachers' trainings would be mandatory for all teachers.

Durrani et al. (2017) stated that the rapid expansion of the school system intensified the need for qualified teachers. He expressed an overview of education policies since 1947 and reflects a tension in the increasing demand for teachers and the quality of teachers' preparation. He argued that the implementation of all measures of quality education remained weak due to lack of quality of teachers and their professional development.

Iftikhar (2016) argued that teachers were unaware about pedagogical strategies. He identified that teachers used traditional teaching methods in the classroom, which is ineffective for students' learning. Actually, teachers lack in practical skills to demonstrate in the classroom by using of corresponding pedagogies. He recommended that teachers training would be conducted in pedagogy and their relevant competencies.

Ahmad et al. (2014) identified the lack of quality of teachers and professional development in Pakistan. They argued that majority of the teachers did not know about the lesson planning which made incapable the teachers to deal various problems in the process of teaching and learning. Moreover, training was essential for quality performance in teaching but there was lack of training opportunities for teachers in Pakistan.

It was concluded that there was lack of professional development in teachers which leads towards lack in pedagogical competencies in classrooms. There were different factors which lead towards lack in professional development. One of them was the training of the teachers. Training had been under criticism for bringing negligible change in teacher competencies (Bilal, 2012). Training should be tailored in those pedagogical competencies which are lacking in teachers.

3.2 Analysis of data related to the observation

To find the pedagogies used by trained and untrained teachers in classroom practices, the observation protocol was used. The data was analyzed and calculated the frequency and percentage as below.

Table 1: Selection and organization of teaching methods from verbal presentation methods and techniques

Teaching Methods	Category	N	Primary Method		Secondary Method	
			f	%	f	%
Lecture	Trained	309	309	100	0	0
	Untrained	310	310	100	0	0
Book Recitation	Trained	309	36	11.7	273	88.3
	Untrained	310	48	15.5	262	84.5
Narration & Story Telling	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Illustration	Trained	309	0	0	16	5.2
	Untrained	310	0	0	0	0

Table 1 shows the data analysis about selection and organization of teaching methods from verbal presentation methods and techniques as used in classroom practices by the teachers. The verbal presentation methods and techniques comprised on lecture, book recitation, narration/storytelling and illustration teaching methods.

The result of the selection and organization of lecture method from verbal presentation methods and techniques showed that 100% (309 out of 309 observations) trained teachers and 100% (310 out of 310 observations) untrained teachers were used lecture method as primary method in the classroom teaching.

The result of the selection and organization of book recitation method from verbal presentation methods and techniques showed that 11.7% (36 out of 309 observations) trained teachers were used book recitation method as primary method while 88.3% (273 out of 309 observations) trained teachers were used book recitation method as secondary method in the classroom teaching, similarly 15.5% (48 out of 310 observations) untrained teachers were

used book recitation method as primary method while 84.5% (262 out of 310 observations) untrained teachers were used book recitation method as secondary method in the classroom teaching.
The result of the selection and organization of narration/storytelling method from verbal presentation methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used narration/storytelling method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used narration/storytelling method as primary or secondary method in the classroom teaching.
The result of the selection and organization of illustration method from verbal presentation methods and techniques showed that 5.2% (16 out of 309 observations) trained teachers were used illustration method as primary method while 94.8% (293 out of 309 observations) trained teachers were not used illustration method as primary or secondary method in the classroom teaching, on the other hand, 100% (310 out of 310 observations) untrained teachers were not used illustration method as primary or secondary method in the classroom teaching.

Table 2: Selection and organization of teaching methods from dialectic methods and techniques

Teaching Methods	Category	N	Primary Method		Secondary Method	
			f	%	f	%
Discussion	Trained	309	0	0	297	96.1
	Untrained	310	0	0	280	90.3
Question- Answer	Trained	309	0	0	297	96.1
	Untrained	310	0	0	243	78.4
Explanation	Trained	309	0	0	278	90
	Untrained	310	0	0	145	46.8

Table 2 shows the data analysis about selection and organization of teaching methods from dialectic methods and techniques as used in classroom practices by the teachers. The dialectic methods and techniques comprised on discussion, question-answer and explanation teaching methods.
The result of the selection and organization of discussion method from dialectic methods and techniques showed that 96.1% (297 out of 309 observations) trained teachers were used discussion method as secondary method while 3.9% (12 out of 309 observations) trained teachers were not used discussion method as primary or secondary method in the classroom teaching, similarly 90.3% (280 out of 310 observations) untrained teachers were used discussion method as secondary method while 9.7% (30 out of 310 observations) untrained teachers were not used discussion method as primary or secondary method in the classroom teaching.
The result of the selection and organization of question-answer method from dialectic methods and techniques showed that 96.1% (297 out of 309 observations) trained teachers were used question-answer method as secondary method while 3.9% (12 out of 309 observations) trained teachers were not used question-answer method as primary or secondary method in the classroom teaching, similarly 78.4% (243 out of 310 observations) untrained teachers were used question-answer method as secondary method while 21.6% (67 out of 310 observations) untrained teachers were not used question-answer method as primary or secondary method in the classroom teaching.
The result of the selection and organization of explanation method from dialectic methods and techniques showed that 90% (278 out of 309 observations) trained teachers were used explanation method as secondary method while 10% (31 out of 309 observations) trained teachers were not used explanation method as primary or secondary method in the classroom teaching, similarly 46.8% (145 out of 310 observations) untrained teachers were used explanation method as secondary method while 53.2% (165 out of 310 observations) untrained teachers were not used explanation method primary or secondary method in the classroom teaching.

Table 3: Selection and organization of teaching methods from doing methods and techniques

Teaching Methods	Category	N	Primary Method		Secondary Method	
			f	%	f	%
Practice	Trained	309	0	0	288	93.2
	Untrained	310	0	0	280	90.3
Demonstration	Trained	309	0	0	176	57
	Untrained	310	0	0	159	51.3
Drill	Trained	309	0	0	133	43
	Untrained	310	0	0	83	26.8

Table 3 shows the data analysis about selection and organization of teaching methods from doing methods and techniques as used in classroom practices by the teachers. The doing methods and techniques comprised on practice, demonstration and drill methods.

The result of the selection and organization of practice method from doing methods and techniques showed that 93.2% (288 out of 309 observations) trained teachers were used practice method as secondary method while 6.8% (21 out of 309 observations) trained teachers were not used practice method as primary or secondary method in the classroom teaching, similarly 90.3% (280 out of 310 observations) untrained teachers were used practice method as secondary method while 9.7% (30 out of 310 observations) untrained teachers were not used practice method as primary or secondary method in the classroom teaching.

The result of the selection and organization of demonstration method from doing methods and techniques showed that 57% (176 out of 309 observations) trained teachers were used demonstration method as secondary method while 43% (133 out of 309 observations) trained teachers were not used demonstration method as primary or secondary method in the classroom teaching, similarly 51.3% (159 out of 310 observations) untrained teachers were used demonstration method as secondary method while 48.7% (151 out of 310 observations) untrained teachers were not used demonstration method as primary or secondary method in the classroom teaching.

The result of the selection and organization of drill method from doing methods and techniques showed that 43% (133 out of 309 observations) trained teachers were used drill method as secondary method while 57% (176 out of 309 observations) trained teachers were not used drill method as primary or secondary method in the classroom teaching, similarly 26.8% (83 out of 310 observations) untrained teachers were used drill method as secondary method while 73.2% (227 out of 310 observations) untrained teachers were not used drill method as primary or secondary method in the classroom teaching.

Table 4: Selection and organization of teaching methods from activity based methods and techniques

Teaching Methods	Category	N	Primary Method		Secondary Method	
			f	%	f	%
Heuristic	Trained	309	0	0	12	3.9
	Untrained	310	0	0	0	0
Problem-Solving	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Inquiry	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Laboratory	Trained	309	0	0	60	19.4
	Untrained	310	0	0	170	54.8
Role Playing	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Simulation	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Games	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0

Table 4 shows the data analysis about selection and organization of teaching methods from activity based methods and techniques as used in classroom practices by the teachers. The activity based methods and techniques comprised on heuristic, problem solving, inquiry, laboratory, role playing, simulation and games teaching methods.

The result of the selection and organization of heuristic method from activity based methods and techniques showed that 3.9% (12 out of 309 observations) trained teachers were used heuristic method as secondary method while 96.1% (297 out of 309 observations) trained teachers were not used heuristic method as primary or secondary method in the classroom teaching, on the other hand, 100% (310 out of 310 observations) untrained teachers were not used heuristic method as primary or secondary method in the classroom teaching.

The result of the selection and organization of problem solving method from activity based methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used problem solving method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used problem solving method as primary or secondary method in the classroom teaching.

The result of the selection and organization of inquiry method from activity based methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used inquiry method as primary or secondary

method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used inquiry method as primary or secondary method in the classroom teaching.
The result of the selection and organization of laboratory method from activity based methods and techniques showed that 19.4% (60 out of 309 observations) trained teachers were used laboratory method as secondary method while 80.6% (249 out of 309 observations) trained teachers were not used laboratory method as primary or secondary method in the classroom teaching, similarly 54.8% (170 out of 310 observations) untrained teachers were used laboratory method as secondary method while 45.2% (140 out of 310 observations) untrained teachers were not used laboratory method as primary or secondary method in the classroom teaching.
The result of the selection and organization of role playing method from activity based methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used role playing method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used role playing method as primary or secondary method in the classroom teaching.
The result of the selection and organization of simulation method from activity based methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used simulation method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used simulation method as primary or secondary method in the classroom teaching.
The result of the selection and organization of games method from activity based methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used games method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used games method as primary or secondary method in the classroom teaching.

Table 5: Selection and organization of teaching methods from innovative methods and techniques

Teaching Methods	Category	N	Primary Method		Secondary Method	
			f	%	f	%
Cooperative	Trained	309	0	0	289	93.5
Learning	Untrained	310	0	0	280	90.3
Inductive	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Deductive	Trained	309	0	0	0	0
	Untrained	310	0	0	0	0
Computer Assisted	Trained	309	0	0	0	0
Instruction	Untrained	310	0	0	0	0

Table 5 shows the data analysis about selection and organization of teaching methods from innovative methods and techniques as used in classroom practices by the teachers. The innovative methods and techniques comprised on cooperative learning, inductive, deductive and computer assisted instruction teaching methods.
The result of the selection and organization of cooperative learning method from innovative methods and techniques showed that 93.5% (289 out of 309 observations) trained teachers were used cooperative learning method as secondary method while 6.5% (20 out of 309 observations) trained teachers were not used cooperative learning method as primary or secondary method in the classroom teaching, similarly 90.3% (280 out of 310 observations) untrained teachers were used cooperative learning method as secondary method while 9.7% (30 out of 310 observations) untrained teachers were not used cooperative learning method as primary or secondary method in the classroom teaching.
The result of the selection and organization of inductive method from innovative methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used inductive method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used inductive method as primary or secondary method in the classroom teaching.
The result of the selection and organization of deductive method from innovative methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used deductive method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used deductive method as primary or secondary method in the classroom teaching.
The result of the selection and organization of computer assisted instruction method from innovative methods and techniques showed that 100% (309 out of 309 observations) trained teachers were not used computer assisted instruction method as primary or secondary method in the classroom teaching, similarly 100% (310 out of 310 observations) untrained teachers were not used computer assisted instruction method as primary or secondary method in the classroom teaching.

4. Conclusion and Recommendation

From the results, it was concluded that there is lack of pedagogical competencies in teachers. Both trained and untrained teachers were not aware about innovative teaching methods and competencies. Instead of professional training, the trained teachers' pedagogies and their relevant competencies were ineffective in bringing desired change among students.

To improve the current state of teachers, there should be improved the teachers training programs. Ningtiyas and Jailani (2018) concluded that Pedagogical competencies influence on teachers' teaching practices. Teachers' teaching competence depends on trainings that teachers follow. Moreover, Focused training has positive effect on the professionalism of teachers in teaching. Focused training comprised on competence-based training. Furthermore, professional development in teachers would be regulated through teacher's training in order to obtain pedagogical competencies in teachers. Therefore, teacher trainings must understand the differences in pedagogical competencies of the teachers, which have been and have not been obtained by teachers.

According to the above narrated Ningtiyas and Jailani's conclusion of the study, there should be focused on the recognition of pedagogical competencies of the teachers whose training is required. According to Csibra and Gergely (2006, 2009, 2011) a teacher preferred to use natural pedagogical competencies to promote learning. The term natural pedagogical competencies is referring to the innate and generic pedagogical competencies of a teacher to promote learning. Furthermore, natural pedagogical competencies are a human-specific capacity that allows us to acquire cultural information from communication. So, the natural pedagogical competencies are developed naturally in the teachers and the teachers give preference to use of their natural pedagogical competencies in the classroom. Besides natural pedagogical competencies, the pedagogical competencies which can be specifically developed only through formal education and training are called teachable pedagogical competencies (Silveyra, 2020).

Natural pedagogical competencies are limited in the teachers and lacked the quality instructions (Bilal, 2012). Quality instruction can be improved through training because training is the only source of understanding the methods of teaching and enhancing the range of pedagogical competencies. So, Training should be conducted in teachable pedagogical competencies to enhance the teachers' teaching capacity.

This is the major aspect of the training which should be adopted in teachers training programs. But in Pakistan, there is lack of this aspect of the training, which is one of the major problems in teachers' training programs. As Bilal (2012) identified that teachers' trainings are under criticism for professional development especially for in-service teachers and this is due to a lack of recognition of teachers' pedagogical competencies. Furthermore, training design is also needed to be modified and made more suitable to the teachers' requirement. Mayens & Hatt (2012) emphasized the need to examine the pre-service teachers' programs. They also emphasized the need to examine that what are the teachable pre-service training courses which are addressed the elements of change in teachers' professional focus from their teaching to students' learning.

The result of the study concluded and recommended that there is need to conduct the focused training of the teachers. Focused training comprised on competence-based training. For focused training, teacher trainings must understand the differences in pedagogies and pedagogical competencies of the teachers, which have been obtained (naturally developed) and have not been obtained (Teachable/only developed through training) by teachers. The study should be conducted on the recognition of natural and teachable pedagogical competencies of the teachers for their professional development. So, that training of teachers should be conducted only in teachable pedagogical competencies to enhance the pedagogical competencies of the teachers instead of wastage of time and resources of training on those pedagogical competencies which the teachers have acquired naturally.

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