

An Inquiry Into Creative Teaching Practices At Secondary School Level In District Peshawar

Sanam Alam¹, Dr Wilayat Bibi², Dr Saima Parwez³, Dr. Hafiz M. Inamullah⁴

¹MPhil scholar, Institute of Education & Research University of Peshawar

²Assistant Professor, Department of Education, Shaheed Benazir Bhutto Women University Peshawar Email: wilayat.bibi@sbbwu.edu.pk

³Assistant Professor, Department of Psychology, Shaheed Benazir Bhutto Women University Peshawar Email: seemiperwez82@hotmail.com

⁴Professor, Institute of Education & Research University of Peshawar Email: hafiznam@uop.edu.pk

ABSTRACT

In the process of creative teaching, the instructor encourages students' interest in the content and then guides them to creatively solve the problem on their own, or presents particular difficulties and asks students to use all available resources to creatively solve the problem. The purpose of this study was to learn more about to examine teachers' innovative teaching approaches among secondary school instructors. For this purpose, the study used Quantitative research method. The population of this study was SST Science and SST General female teachers of Government Girls High Schools. For this study 65 schools were selected by using Stratified Random Sampling techniques. The sample of the study was 231 teachers, 90 SST Science and 232 SST General Teachers. The researcher used self-constructed liker type Questionnaire for the collection of quantitative data for the study comprised of 39 items. It was concluded that most participants learn something new, come up with fresh ideas, utilize feelings to help them envision, stand out from the crowd, produce ideas that lead to a range of professions, and largely accomplish their tasks by focusing on effective ideas all of the time. Many instructors want to teach a variety of instructional materials, examine ideas for dealing with real-world challenges, and use a variety of methodologies in order to stay one step ahead of their colleagues. Students can learn more by taking them to locations other than the classroom, such as the laboratory, library, or grounds. They incorporated new knowledge very immediately, arranged class so that every student could engage, employed an interactive instructional style, and answered student concerns the majority of the time.

Key words: Peshawar. Creative Teaching. Creative Teaching Practices.

Background of Study

Creativity is a social and mental process involving to create new ideas, thinking and concepts. Creativity is universal; one cannot associate creativity with a single field. According to Stanger and Karwoski (1973), creativity involves the production of entirely or partially new idea. Creativity is the capability of a person to create something that is significantly new or

lately not known to the producer. Furthermore, creativity is the capability of a person to entirely visualize things along with all of their dimensions and come up with unique practical approach to their abstract ideas that lacks in common population. So, Creativity is sort of thinking out of box and forming a chain reaction i-e one idea lead towards other (Mangal, 2006).

Wilson, Guilford and Christensen (1974) believed that in creative practice something

innovative is produced let that be an idea or an entity comprising of few or prearrangement of previously known elements. In addition, there is no such concept, as a completely uncreative person. Even an action of producing something that is previously unknown as simple as a sentence that has never been said before, is an action of creation. Hence, creativity is said to be a naturally occurring phenomenon of everyone's mental process, although it differs from one person to another (Benlamri, 2013). The most important resource of 21st century is Creativity which has basic role in all fields. It can be developed by training and education. The teacher is main person who is inculcating the creativity in an individual and develop everyone for their daily and social life. Creativity involves doing these things in ways that are unique and efficient to achieve desired result (Cropley, 2011).

There are two essentially different ways to understand teaching. Firstly, sees teaching as a teacher-centred and secondly, sees teaching as a learner-centred (Starr-Glass, 2019). Teaching is an action planned for achieving important learning through a technique that is ethically and pedagogically acceptable (Muraina, 2015). Teaching may refer to appearing or disclosing to a student how to accomplish something (Gitonga, 2015). The primary capacity of instructing is to make learning successful. The learning procedure would get finished as a result of instructing, along these instructing and learning are firmly related (Physicscatalyst, 2018).

Process of teaching is to entertain learner's requirements, practises, feelings, and intervening so that they learn specific things, and also go beyond the given (Smith, 2018). While conventional teaching method is still widely used in schools which is out dated way of teaching and was all about recitation, for example students would sit in silence, while one student after another took turns to narrate the lesson, until and unless each one had been called upon listened to

each student's recitation, and they were expected to study and memorise the at the end of the unit a written test or oral examinations were conducted (Stephen Perse Foundation, 2017). Therefore, our teaching approaches should be long termed that not only transform students into thinkers but make them lifelong learners. Furthermore, creating wide range of interests, developing natural curiosity and fostering creative thoughts through a systematic channel for instruction are the basic objectives of creative teaching. If, teachers are capable to create a creativity-fostering atmosphere itself. Even, wingless leaves can fly like birds when wind blows (Thomas, 2008).

Creative teaching is about the teacher's personality, personal creativity and its manifestations in everyday practice. Whereas, teaching for creativity is seen to involve teachers in identifying children's creative strengths and fostering their creativity (Cremin, 2009).

According to the study conducted by Shaheen (2011) in Pakistan many teachers said that, they used the textbook to foster creativity among students where the investigation of the science textbook revealed that the contents for teaching were only applicable to knowledge acquisition. While, the questions which according to teachers develop creativity had nothing to do more than to expect children remember what was already taught and for teachers to check the retention of previously taught knowledge. This brings doubt over teacher's perceptions of creativity and raises doubts over awareness regarding creativity improving techniques for teaching. Creativity teaching is not about recalling previously learned things or to insertion of content into the brain of students rather it is to make learner capable enough to produce new compositions and novel ideas which are previously not known to them.

Statement of the Problem

Primarily, the awareness teachers have about fostered creativity has nothing to do with creativity rather expecting learners to recall what has been taught and to see either, they remember previously taught content. This brings doubt over teachers of understanding about creativity and elevates doubts over their basic knowledge about creativity boosting practises. The creative teaching is necessary in modern era. Creative teaching is helpful and important for quality teaching. Creative teaching inculcates the ideas, skills, thinking and opinions. Normally many of the teachers are teaching through traditional lecture method. The teaching has main role in learning if teacher use creative teaching it would have great influence. The problem statement of the purposed study will be “An Inquiry into Creative Teaching Practices at Secondary School Level in District Peshawar.”

Objectives of the Study

Following are the objectives of the study:

- To analyse the practices of teachers for creative teaching at secondary school level.

Research Hypothesis

Following is research hypothesis:

- H₀: There are no significant practices of teachers for creative teaching among SST Science and SST General Teachers at secondary school level.

Significance of the Study

Anatole France said that entire art of teaching is only the skill of awakening the natural curiosity of the young minds for the purpose of satisfying it afterwards (Thomas, 2008). We are living in 21st century where standards of education are rising day by day. Therefore, opting as well as adopting latest methods and techniques possible are mandatory for today’s teachers to get their

students aligned with others so that they may not lag behind. Teaching in schools these days are actually producing students more imitative rather than creative. Bringing forward the unexpressed creativity is also one of the prime objectives of education. It is not necessary for every child in the class the creatively genius by birth but certain degree can be nurtured by the considerate efforts and desire of teachers. The current educational system does not provide ample amount of opportunities for developing the thinking skills in schoolchildren as it follows a rigid course of prescribed syllabus.

Delimitation of the Study

This study is delimited to selected Girls High school teachers of District Peshawar of KP Province, of Pakistan.

Research Methodology

Nature of Research

The study uses quantitative research method. Additionally, the study utilizes descriptive research design. Creswell (2005) noted that quantitative research is the process of gathering, analysing, deducing, and writing the outcomes of a study (Gay, Miles and Airasian, 2011) The study comprises of single variable and does not deal with a causes or effect relationship (Hossain, 2019).

Population of the Study

Pilot and Hungler (1999) expresses about population that it contains all the subjects with similar characteristics .So, population of this study include all 544 Govt. Girls High School teachers from total 65 Govt. Girls High Schools of District Peshawar. Among total 544 Secondary School Teachers, 333 are SST general and 211 are SST science (EMIS, 2018-19)

Sample Size

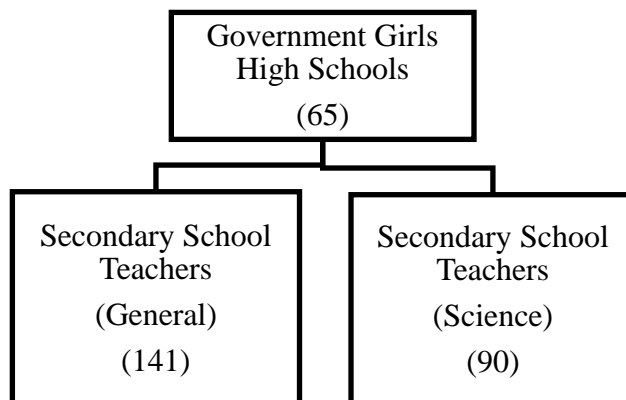
The sample size of the study was selected from Govt. Girls High School teachers of district

Peshawar. According to EMIS (2018-19), there are 65 Government Girls High Schools in district Peshawar in which there are 544 working secondary school teachers i.e. 333 are SST (General) and 211 are SST (Science). According to Yamane (1976), stratified random sampling is

used for selecting sample from each stratum by using proportional allocation technique when population is known. Henceforth, SST (General) will be 141 and SST (Science) will be 90 from 65 Govt. Girls High Schools (see table 1.2 and figure.2).

Table 3.2. Sample of the study

| Discipline | Subject Teachers | Respondents |
|----------------|--------------------------|-------------|
| General | Secondary School Teacher | 141 |
| Science | Secondary School Teacher | 90 |
| Total teachers | | 231 |



Research Instrument

After conducting a thorough review of related literature and keeping the study's objectives in mind, the researcher created a questionnaire with 39 statements to determine teachers' concepts and practices for creative teaching at the secondary school level, as well as to investigate the problems that teachers face in creative teaching at the secondary level. Teachers' perceptions were measured using the following rating scale, which was built on a three-point (Likert) scale. Always, Sometimes, Rarely

Hence, in order to prepare questionnaire for teachers, studies of Alyssa (2018), Bostwick (2018), Knowledge Management Indicator

Library (2017), Lee, Song, & Hong (2019), Liang, Chang, Chang, & Ling (2012), Mitchell (2015), Ormord (2006), Rayan and Deci (2000), Richard (2016) Serdyukov (2017), Social Interactions: Definition & Types (2015), SparcIt (2017), William (2019), Wilson, Guilford, & Christensen, (1953), Wilson (2014) were reviewed thoroughly. As a result, indication have been identified and instrument was formed. (Appendix-B)

Pilot Testing

To check the reliability of research tools, to refine the items of each instrument pilot testing was conducted, while it helps for validity and the practical application of the research instruments. After the development of the research

instruments, a pilot study was conducted on 23 teachers of government girls' high schools which is 10% of sample and was not the part of data to be collected for study (Connelly, 2008). In the light of the feedback, items of the questionnaires were deleted and modified according to the suggestions of the respondents. The final versions of research instruments were developed in close consultation with the supervisor.

Validation of the Research Instruments

After the development of the research instruments, it was necessary to get instruments validated. As a result, the research tools were validated based on the opinions of specialists. The process of collecting and analysing evidence concerning the validity of a research instrument is known as validation (Cohen & Swerdlik, 2010). Experts from the education department's top faculty members were chosen to validate the study tools for this aim.

Reliability of Instrument

The reliability of any questionnaire is critical to the study findings. This means that this questionnaire will find a precise response to the question it was created for, and the answers of a trustworthy questionnaire will be accepted at all levels. According to Cohen et al. (2013), the terms dependability and consistency have essentially the same meaning. The instrument's dependability will be determined using Cronbach's alpha reliability co-efficient (1951).

Data Collection procedure

The questionnaire was conducted by the researcher herself to a sample of teachers from district Peshawar schools. The research objectives were described to the research participants prior to the administration of the surveys, and informed consent was obtained

using the covering letter that accompanied the questionnaires. In all, data was gathered from 90 SST (Science) and 141 SST (General) students in Government Girls High Schools.

The respondents were given the option of writing their personal information, such as their name, experiences, and so on, on the questionnaires. All respondents were promised that the information they supplied would only be used for research purposes. After clearing up any ambiguities about confidentiality, the respondents appeared calm, courageous, and eager to react to the study data. All instructors were given questionnaires to fill out in order to collect their feedback.

Data Analysis

In a final data-gathering step, quantifiable data on teachers' concepts and practises for creative teaching at the secondary school level was obtained using a questionnaire, as well as the issues that instructors experience in creative teaching at the secondary level. SPSS software was used to analyse the data.

Data Analysis and Interpretation

This chapter is about the presentation, analysis and interpretation of the data. It is comprised of the presentation, analysis and interpretation of the quantitative data of the study.

Concept and Practices of Teachers for Creative Teaching

Endorse imaginative work

Teachers should help students grow their imaginations because creativity is essentially liberated imagination, and don't forget that your own classroom behaviors and activities can help kids develop and improve their creative or imaginative thoughts and traits.

Table 4.1 Endorse imaginative work

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square |
|---------|-----------|--------|-----------|--------|------------|
|---------|-----------|--------|-----------|--------|------------|

| | | | | P-value | |
|------|---|----------------|---------------|----------------|-------------------|
| i. | I explore what is unknown to the students. | 158 (68.4%) | 68 (29.4%) | 5 (2.2%) | 158.36 (0.000) |
| ii. | I come up with new ideas with my intuition. | 130 (56.3%) | 82 (35.5%) | 19 (8.2%) | 80.49 (0.000) |
| iii. | I often help myself imagine through feeling. | 121 (52.4%) | 96 (41.6%) | 14 (6.1%) | 82.77 (0.000) |
| iv. | I present unique ideas compared to others. | 138 (59.7%) | 79 (34.2%) | 14 (6.1%) | 104.75 (0.000) |
| v. | I mostly complete my task by focusing on effective ideas. | 161 (69.7%) | 61 (26.4%) | 9 (3.9%) | 146.05 (0.000) |
| vi. | I generate ideas that lead to multiple fields of tasks. | 138 (59.7%) | 72 (31.2%) | 21 (9.1%) | 87.45 (0.00) |

Table 4.1. Shows endorsement of imaginative work in creative teaching process where different questions were asked and responded where all items occurred frequently starting from i till vi followed by sometimes and rarely. While, p-value is 0.000 which is showing significant at level 0.05 for all items. Starting from exploration what is unknown to the students' respondents find themselves relevant by 68.4% while 28% respondents agreed to sometimes followed by 2.2% of those who stick to rarely and its chi square value is 158.36. Followed by item ii, iii, iv, and v where most of the sample from population relate themselves by 130 (56.3%), 121(52.4%), 138(59.7%) and 161(69.7%) of frequency table whereas 82(35.5%), 96(41.6%),79(34.2%) and 61(26.4%) relates to

sometimes while rest concluded to rarely being 19(8.2%), 14(6.1%), 14(6.1%) and 9(3.9%) of frequency table and its chi square values are 80.49, 82.77, 104.75, 146.05 respectively. Ending with results from higher to lower that of idea generation leading to multiple fields of tasks by 138 (59.7%) for always to 72 (31.2%) for some times ending by 21 (9.1%) with chi square value as 87.45. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondents in almost all the items.

4.2 Originality

In the classroom, unique ideas should be encouraged. Students are enthusiastic to share what they have just developed because they believe it will be well received and appreciated.

Table 4.2. Originality

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|---|----------------|----------------|--------------|-----------------------|
| i. | I always think a step ahead than others. | 113 (48.9%) | 107 (46.3%) | 11 (4.8%) | 82.46 (0.000) |
| ii. | I tends towards teaching approaches that are unusual but interesting. | 107 (46.3%) | 109 (47.2%) | 15 (6.5%) | 77.37 (0.000) |
| iii. | I prefer teaching all types of teaching material. | 133 (57.6%) | 89 (38.5%) | 9 (3.9%) | 106.31 (0.000) |
| iv. | I contemplate ideas to cope up with authentic material. | 112 (48.5%) | 103 (44.6%) | 16 (6.9%) | 73.01 (0.000) |

Table 4.2 describes data regarding originality that takes place during creative teaching where data results in descending order i. e from higher to lower value on Likert's scale from Always to Rarely. While, p-value is 0.000 which is showing significant at level 0.05 for all items. Here, item i shows that creative teachers always think step ahead by 48.9% where lagging by 2.6% occurring sometimes and happens in rare cases by 4.8%. 46.3% of creative teachers are always inclined towards unique and interesting approaches during their teaching, 47.2% sometimes and 6.5% rarely with chi square value of 82.46, 77.37 respectively. While, item iii and iv occurs more frequently by 57.6% and 48.5% where occurs

38.5% and 44.6% sometimes and finally least happens rarely by 3.9% and 6.9% respectively along with its chi value of 106.31, 73.01. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondents in almost all the items.

4.3 Novelty

Creativity refers to a person's ability to create something new or novel, but this novelty does not always imply the creation of a completely new idea or object that has never existed or been experienced, but rather the creation of a new combination of existing elements or the reshaping of already existing facts and principles.

Table 4.3. Novelty

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|---|----------------|---------------|--------------|-----------------------|
| i. | I use different methodologies for teaching. | 136 (58.9%) | 73 (31.6%) | 22 (9.5%) | 81.50 (0.000) |

| | | | | | |
|------|---|----------------|----------------|---------------|------------------|
| ii. | I change location other than classroom so that students learn more i.e. laboratory, library, lawns etc. | 87 (37.7%) | 115 (49.8%) | 29 (12.6%) | 54.72 (0.000) |
| iii. | I take new knowledge immediately under consideration. | 134 (58.0%) | 83 35.9 | 14 (6.1%) | 91.24 (0.000) |

Table 4.3 indicates that the two categories rated the most frequently in the combined categories of “always” and “sometimes” by the respondents related to Novelty. While, p-value is 0.000 which is showing significant at level 0.05 for all items. Results indicate that 58.9% of teachers responded positively that when they practice different methodology for teaching. Results indicates that 49.8% of teachers responded that they agreed to change of location other than classroom sometimes so that students may learn more and at the same time 58% of teacher respondents

claimed that they take new knowledge immediately under consideration. Hence, respectively for all items chi values are 81.50, 54.72, 91.24. The one response is observed as the least frequently in the combined categories of “Rarely” by the respondents in almost all the items.

4.4 Atmosphere

It is necessary to create an environment that is conducive to creative thinking and expression in order to stimulate and nourish creativity in youngsters.

Table 4.4. Atmosphere

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|---|----------------|---------------|--------------|--------------------|
| i. | I set class in a way so that every student may participate. | 153 (66.2%) | 66 (28.6%) | 12 (5.2%) | 117.22 (0.000) |
| ii. | I utilize interactive instructional strategy. | 132 (57.1%) | 81 (35.1%) | 18 (7.8%) | 86.36 (0.000) |
| iii. | I address student and conduct class persuasively. | 140 (60.6%) | 77 (33.3%) | 14 (6.1%) | 106.70 (0.000) |
| iv. | I plan meaning full activities, tasks and rules. | 142 (61.5%) | 70 (30.3%) | 19 (8.2%) | 100.15 (0.000) |

It can be observed from table 4.4 that two responses rated the most frequently in the combined categories of “Always” and “sometimes” by the respondents associated to

Atmosphere in creative teaching concept and practices While, p-value is 0.000 which is showing significant at level 0.05 for all items. Where, item i and ii shows 66.2% and 57.1% occurring always followed by 28.6% and 35.1%

happens to be sometimes lastly come off rarely with 5.2% and 7.8% for which chi square values are 117.2, 86.36 respectively. Whilst, 60.6% teachers address students and conduct class persuasively, also 61.5% respondent teachers' plans meaning full activities, tasks and rules and respectively their chi values 106.70, 100.15. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondents in almost all the items.

Table 4.5. Develop Curiosity

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|---|----------------|---------------|---------------|-----------------------|
| i. | I design questions in a way that leads towards another. | 128 (55.4%) | 98 (42.4%) | 5 (2.2%) | 104.72 (0.000) |
| ii. | I usually leave students with a benefit of doubt. | 109 (47.2%) | 90 (39.0%) | 32 (13.9%) | 40.07 (0.000) |
| iii. | I can deal with students from any background. | 168 (72.7%) | 54 (23.4%) | 9 (3.9%) | 182.83 (0.000) |
| iv. | I think critically before delivering lesson. | 143 (61.9%) | 80 (34.6%) | 8 (3.5%) | 120.18 (0.000) |
| v. | I feel enthusiastic before content delivery. | 140 (60.6%) | 75 (32.5%) | 16 (6.9%) | 98.26 (0.000) |

It can be observed from table 4.5 that two responses rated the most frequently in the combined categories of "Always" and "sometimes" by the respondents associated to curiosity development in creative teaching concept and practices While, p-value is 0.000 which is showing significant at level 0.05 for all items. Here, item i and ii shows 55.4% and 47.2% occurring always followed by 42.4% and 39% happens to be sometimes lastly come off rarely with 2.2% and 13.9% with chi value 104.72, 40.07 respectively. Whilst, 72.7% teachers could handle students from diverse background, also

4.5 Develop Curiosity

Curiosity motivates people to seek out new experiences. Learning comes as a result of actions performed to fulfill one's curiosity about the world around them, beginning in infancy. As a result, fostering curiosity should be our first step toward bettering classroom learning.

61.9% respondent teachers' think critically before class delivery and 60.6% felt enthusiastic before content delivery with chi square value as 182.83, 120.18, 98.26 respectively. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondents in almost all the items.

4.6 Divergent thinking

A habit of looking for differences and new ways of arranging knowledge has been developed. Because it requires us to think beyond the box, it

provides us with a wide choice of solutions to a problem.

Table 4.6. Divergent Thinking

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|---|----------------|---------------|--------------|-----------------------|
| i. | I think critically over what has been taught previously. | 149 (64.5%) | 76 (32.9%) | 6 (2.6%) | 132.96 (0.000) |
| ii. | I can generate many ideas quickly. | 150 (64.9%) | 78 (33.8%) | 3 (1.3%) | 140.33 (0.000) |
| iii. | I look beyond the obvious solutions and generate novel ideas and responses. | 137 (59.3%) | 91 (39.4%) | 3 (1.3%) | 119.24 (0.000) |
| iv. | I am able to generate variety of ideas and responses. | 143 (61.9%) | 78 (33.8%) | 10 (4.3%) | 110.05 (0.000) |
| v. | I can express idea while teaching. | 165 (71.4%) | 54 (23.4%) | 12 (5.2%) | 162.31 (0.000) |

It can be perceived from table 4.6 that two responses rated the most frequently in the combined categories of “Always” and “sometimes” by the respondents related to problems Divergent thinking. While, p-value is 0.000 which is showing significant at level 0.05 for all items. First item indicated that 64.5% of teachers think critically over what has previously taught whereas, results shows that nearly 32.9% faced it sometimes and 2.6% it happens rarely along with 132.96 as chi value. Approximately, 64.9% teachers generate ideas swiftly while, to 1.3 % it occurs rarely and chi square value as 140.33. In table 4.6 item iii, iv and v respectively

indicated 59.3%, 61.9% and 71.4% most frequent responses along with 119.24, 110.05 and 162.31 as chi square values. The one response is observed as the least frequently in the combined categories of “Rarely” by the respondent in almost all the it.

4.7 Social interaction with students

Active engagement and contact with students in the classroom is critical, and one method to accomplish this is for students to take on the role of readers, writers, presenters, listeners, and thinkers in the classroom through active involvement in social interaction with others.

Table 4.7. Social interaction with students

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|-----------|--------|-----------|--------|-----------------------|
|---------|-----------|--------|-----------|--------|-----------------------|

| | | | | | |
|-------|--|----------------|---------------|--------------|-------------------|
| i. | I switch languages so that students may understand. | 181 (78.4%) | 47 (20.3%) | 3 (1.3%) | 230.33 (0.000) |
| ii. | I collaborate with students in classroom. | 168 (72.7%) | 59 (25.5%) | 4 (1.7%) | 175.40 (0.000) |
| iii. | I welcome student's idea. | 184 (79.7%) | 46 (19.9%) | 1 (0.4%) | 229.11 (0.000) |
| iv. | I welcome student's questions. | 196 (84.8%) | 35 (15.2%) | 0 (0%) | 120.73 (0.000) |
| v. | I cover topic within the class time. | 172 (74.5%) | 50 (21.6%) | 9 (3.9%) | 189.92 (0.000) |
| vi. | I remain sure about my lesson plans. | 154 (66.7%) | 67 (29.0%) | 10 (4.3%) | 143.61 (0.000) |
| vii. | I handle academic conflict between ideas and knowledge in class. | 142 (61.5%) | 82 (35.5%) | 7 (3.0%) | 117.29 (0.000) |
| viii. | I respect all students and treat them equally. | 201 (87.0%) | 27 (11.7%) | 3 (1.3%) | 285.61 (0.000) |

It can be observed from table 4.7 that two responses rated the most frequently in the combined categories of "Always" and "sometimes" by the respondents related to Social interaction with students. While, p-value is 0.000 which is showing significant at level 0.05 for all items. First item indicated that 78.4% of responses by teachers switch languages while teaching whereas, results shows that nearly 20.3% faced it sometimes and 1.3% it happens rarely. Approximately, 72.7% teachers collaborate with students while, to 1,7% it occurs rarely. In table 4.7 item iii, iv and v respectively indicated 79.7%, 84.8% and 74.5% most frequent responses. While the results for teachers remaining sure about their lesson plans were 66.7% frequent, 61.5% always handle academic

conflicts, 87% teachers all the time respects all students and treat their students equally. However, chi square value for all items respectively are 230.33, 175.40, 229.11, 120.73, 189.92, 143.61, 117.29, 285.61. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondent in almost all the it.

4.8 Relevance

According to research, relevant learning falls within the area of effective learning, which should be enough to make us reconsider our lesson designs. Relevant, meaningful activities that both emotionally interest pupils and link with what they already know are what help them form neural connections and store long-term memories.

Table 4.8. Relevance

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|--|----------------|---------------|--------------|-----------------------|
| i. | I envision for future. | 168 (72.7%) | 55 (23.8%) | 8 (3.5%) | 175.66 (0.000) |
| ii. | I connect course content to activities and design lesson very effectively. | 135 (58.4%) | 78 (33.8%) | 18 (7.8%) | 96.96 (0.000) |

It can be observed from table 4.8 that two responses rated the most frequently in the combined categories of “Always” and “sometimes” by the respondents related to relevance in creative teaching concept and practices. While, p-value is 0.000 which is showing significant at level 0.05 for all items. Where, item i and ii shows 72.7% and 58.4% occurring always followed by 23.8% and 33.8% happens to be sometimes lastly come off rarely with 3.5% and 7.8% for envision for future and connection of course content to activities and design lesson effectively for its chi square value as 175.66, 96.96 correspondingly. The one

response is observed as the least frequently in the combined categories of “Rarely” by the respondents in almost all the items.

4.9 Appropriateness

There is no one-size-fits-all teaching model that can be applied to all learning contexts. As a result, there are no one-size-fits-all teaching models. In fact, certain models are more suited to particular jobs than others. The more models instructors investigate and put into practice, the more techniques they will have at their disposal, and the higher their prospects of reaching and teaching their students to construct creative learning environments will be.

Table 4.9. Appropriateness

| Sr. No. | Statement | Always | Sometimes | Rarely | Chi-square P-value |
|---------|--|----------------|---------------|--------------|-----------------------|
| i. | I breakdown course material into chunks for lifelong learning. | 151 (65.4%) | 68 (29.4%) | 12 (5.2%) | 116.90 (0.000) |
| ii. | I use different strategies to involve students. | 159 (68.8%) | 62 (26.8%) | 10 (4.3%) | 153.68 (0.000) |

It can be observed from table 4.9 that two responses rated the most frequently in the combined categories of “Always” and “sometimes” by the respondents related to

appropriateness in creative teaching concept and practices. While, p-value is 0.000 which is showing significant at level 0.05 for all items. Here, item i and ii shows 65.4% and 68.8% occurring always followed by 29.4% and 26.8%

happens to be sometimes lastly come off rarely with 5.2% and 4.3% for breaking down of course material into chunks and application of different strategies for student's engagement with its chi square value 116.90, 153.68 respectively. The one response is observed as the least frequently in the combined categories of "Rarely" by the respondents in almost all the items.

Discussion

The discussion section is one of the final parts of a research paper, describes, analyzes, interprets their findings, explain the significance of those results and tie everything back to the research question(s)

Practices of Teachers for Creative Teaching

Data regarding practices of teachers for creative teaching most participants discover what their pupils didn't know, come up with new ideas, aid themselves in envisioning via feelings, be distinctive in comparison to others, generate ideas that lead to numerous areas of work, and mainly accomplish their tasks by focusing on effective ideas all of the time. The findings of this study suggest that there is a link between innovative teaching and student achievement. It is essential to instruct for creativity. Instructors teach creatively and for creativity depending on the situations they are in. They do both when they think it's acceptable, and they do both at times. It's possible that teaching for creativity will emerge naturally from classroom conditions. It wasn't meant to be used in that way. Teachers are more inclined to teach for creativity in environments where they are supported. Despite evidence of creative reactions to limited conditions, teaching creatively is a challenge (Palaniappan, 2009).

Many instructors are constantly one step ahead of their peers, preferring to teach a variety of instructional materials, pondering ideas to deal with real subject, and employing various approaches. Changing locations outside of the

classroom, such as the laboratory, library, or grounds, can help pupils learn more. Most of the time, they took new knowledge into consideration right away, set up class in such a way that every student can participate, use an interactive instructional approach, address students and conduct class in a commanding manner, plan meaningful activities, tasks, and rules to be creative and bring students' creativity along, and plan meaningful activities, tasks, and rules to be creative and bring students' creativity along. a method of infusing creative processes and elements into the educational process. It also takes into account the teacher's creative personality traits and creative thinking processes, which he or she employs in developing instructional tactics to improve student learning and motivation. When a creative music instructor utilizes many tape recorders to teach the developing portion of Beethoven's Eroica, which pupils have found difficult to grasp, this is an example of innovative teaching (Palaniappan, 2009).

Data regarding practices of teachers for creative teaching according to respondents, they design questions in a way that leads to another, usually gives students the benefit of the doubt, can deal with students from all backgrounds, think critically before delivering a lesson, felt enthusiastic before delivering content, thought critically over what had previously been taught, can generate many ideas quickly, looked beyond the obvious solutions and generate novel ideas and responses, was able to generate a variety of ideas and responses, was able to generate a variety of ideas and responses. Teaching creativity is described as the act of planning and structuring education in order to promote students' thinking skills, particularly creative thinking skills. Teachers teaching creativity in a language class, for example, can invite students to write a fresh conclusion for a popular narrative or rework an ending to a story they already know (Mendelson, 2001).

Data regarding practices of teachers for creative teaching many of the participating teachers collaborated with students in the classroom, welcomed student ideas, welcomed student questions, covered topics within class time, remained confident in my lesson plans, handled academic conflict between ideas and knowledge in class, respected all students and treated them equally, envisioned for the future, connected course content to activities and designed lessons very effectively, broke down course material into chunks for lifelong learning, and broke down course material into chunks for lifelong learning. The school atmosphere influences all three elements stated above. Other instructors and colleagues, the administrator, and other students are all part of the school environment, as are the regulations that govern the day-to-day operations of the school and the infrastructure that the teachers and students have access to. Support from other instructors, for example, may provide a teacher with a great supply of creative energy. It's also important to have a supportive principal who's prepared to let instructors test out new teaching techniques. Teachers and other students benefit from a creative environment created by creative pupils (Aoki, 2004).

Conclusion

This section deals with the main conclusions of the study. As it is a Quantitative Method study, therefore the data provides the general description Hence, following conclusions were formed based on the study that most of the participants explore what was unknown to their students, come up with new ideas, assist themselves imagining through feeling, be unique as compared to others along with generating ideas that leads to multiple fields of tasks and mostly complete their tasks by focusing on effective ideas all the time.

Many teachers always thought a step ahead than others, prefers teaching all types of

teaching material, contemplate ideas to cope up with authentic material, utilizes different methodologies. Whereas, sometimes changing location other than classroom so that students learn more i.e. laboratory, library, lawns etc. Most of the time they took new knowledge immediately under consideration, settle class in a way so that every student may participate, utilizes interactive instructional approach, addresses student and conducted class influentially, planed meaning full activities and tasks and rules to be creative and bring along students' creativity.

From the view of respondents they design questions in a way that leads towards another, usually leaves students with a benefit of doubt, can deal with students from any background, think critically before delivering lesson, felt enthusiastic before content delivery, thought critically over what has been taught previously, generated many ideas quickly, looked beyond the obvious solutions and generate novel ideas and responses, was able to generate variety of ideas and responses, can express idea while teaching and switch languages so that students may understand.

Many of the participant teachers collaborated with students in classroom, welcomed student's idea, welcomed student's questions, covered topic within the class time, remained sure about their lesson plans, handled academic conflict between ideas and knowledge in class, respected all students and treat them equally, envision for future, connected course content to activities and design lesson very effectively, broke down course material into chunks for lifelong learning and used different strategies to involve students.

References

1. Alyssa. (2018). 5 ways to keep novelty in the classroom [Web log post]. Retrieved from <https://teachinginthefastlane.com/2015/0>

- 6/5-ways-to-keep-novelty-in-the-classroom.html
2. Benlamri, F. (2013). Creative teaching to increase student's achievements in speaking (Unpublished master's thesis). Mohamed Khieder University of Biskra, Biskra, Algeria.
 3. Cohen R, Swerdlik M. (2010). Psychological testing and assessment. Burr Ridge, IL: McGraw-Hill.
 4. Cohen, A. B., Lee, D., Long, M. D., Kappelman, M. D., Martin, C. F., Sandler, R. S., & Lewis, J. D. (2013). Dietary patterns and self-reported associations of diet with symptoms of inflammatory bowel disease. *Digestive diseases and sciences*, 58(5), 1322-1328.
 5. Connelly, L. M. (2008). Research considerations: power analysis and effect size. *MedSurg Nursing*, 17(1), 41-43.
 6. Cremin, T. (2009). Creative teachers and Creative Teaching. In Wilson, A. (Ed.), *Creativity in Primary Education*. SAGE Publications.
 7. Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, N.J: Pearson, Merrill, Prentice Hall.
 8. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
 9. Cropley, A. (2011). Definitions of creativity. In M. A. Pritzker, *Encyclopedia of creativity*, Edition: 2nd ed (pp. 511-524). Hamberg: Academic Press.
 10. EMIS-KP. (2018-19). Retrieved from <https://www.kpese.gov.pk/Downloads/ASC/ASC%202018-19.pdf>.
 11. Bostwick, E. (2018, September 15). Five characteristics of the divergent teacher [Web log post]. Retrieved from <https://elisabethbostwick.com/2018/09/15/five-characteristics-of-the-divergent-teacher/>
 12. Gay, L. R, Miles, G. E. and Airasian, P. (2011). *Educational Research: Competencies for Analysis and Applications* (10th ed.). Boston: Pearson Education International.
 13. Gitonga, C. G. (2015). *Educational technology integration and active learning*. Nairobi: IGI Global.
 14. Hossain, S. (2019). What is univariate, bivariate and multivariate analysis? Hot Cubator Learn Grow Catalyse. Retrieved from <https://hotcubator.com.au/research/what-is-univariate-bivariate-and-multivariate-analysis/>
https://www.researchgate.net/publication/262689636_The_exploration_of_indicators_of_imagination
 15. Knowledge Management Indicator Library. (2017, December 13). Indicators that measure social interaction. Retrieved January 22, 2021, from <https://indicators.globalhealthknowledge.org/taxonomy/term/69>
 16. Lee, J., Song, H. D., & Hong, A. J. (2019). Exploring factors, and indicators for measuring students' sustainable engagement in e-Learning. *Sustainability*, 11(4), 1-12. Retrieved from <https://doi.org/10.3390/su11040985>
 17. Liang, C., Chang, C. C., Chang, Y., & Ling, L. J. (2012). The exploration of indicators of imagination. *TOJET: The Turkish Online Journal of Educational Technology*, 11(3), 366-374.
 18. LoBiondo-Wood, G., & Haber, J. (1998). *Nursing research: Methods and critical appraisal for evidence-based practice*. Elsevier Health Sciences.
 19. Mitchell, M. P. (2015, February 17). Curiosity: The force within a hungry mind. Retrieved January 20, 2021, from

- <https://www.edutopia.org/blog/8-pathways-curiosity-hungry-mind-marilyn-price-mitchel>
20. Mangal, S. K. (2006). *Advanced Educational Psychology* (2nd ed.). New Delhi: Prentice-Hall of India Private Limited.
 21. Muraina, M. B. (2015). *Enhancing teacher education with advanced instructional technologies*. Ilorin: IGI Global.
 22. Ormrod, J.E. (2006). *Educational psychology: Developing learners* (5th ed.). Upper Saddle River, N.J.: Pearson Education, Inc.
 23. Physicscatalyst (2018). *Concept of teaching and its definition: Learning and teaching (B.Ed. NOTES)*. Retrieved from Physics Catalyst <https://physicscatalyst.com/graduation/teaching-definition/>
 24. Pilot, D. F., & Hungler, B. P. (1999). *Nursing research: principles and methods*. Philadelphia: JB Lippincott Company.
 25. Richard, H. (2016). *Classroom environment indicator description indicators of success*. Retrieved January 22, 2021, from <https://docplayer.net/19867384-Classroom-environment-indicator-description-indicators-of-success.html>
 26. Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
 27. Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412961288.
 28. Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it? *Journal of Research in Innovative Teaching & Learning*, 10(1), 4-33. Retrieved from <https://doi.org/10.1108/JRIT-10-2016-0007>.
 29. Shaheen, R. (2011). *The place of creativity in Pakistani primary education system: An investigation into the factors enhancing and inhibiting primary school children's creativity* (Doctoral dissertation, University of Birmingham, Birmingham, England). Retrieved from: <https://files.eric.ed.gov/fulltext/ED522273.pdf>.
 30. Smith, M. K. (2018). 'What is teaching?' In the encyclopedia of pedagogy and informal education. Retrieved from <https://infed.org/mobi/what-is-teaching/>
 31. Social Interactions: Definition & Types. (2015, January 20). Retrieved January 19, 2021, from <https://study.com/academy/lesson/social-interactions-definition-types-quiz.html>
 32. SparcIt. (2017, January 25). What improves one's creative abilities? Brief description of divergent and convergent thinking [Web log post]. Retrieved from <https://medium.com/sparcit-blog/what-improves-ones-creative-abilities-brief-description-of-divergent-and-convergent-thinking-8d1cd11e5282>
 33. Stranger, R., Karwoski, T. F., Crow, L. D., & Crow, A. (1973). *Educational psychology*. New Delhi: Eurasia Publishing House.
 34. Thomas, D. M. (2008). *Effective teaching: A measure of excellence*. Ram Nagar, New Delhi: S.Chand and Compny Pvt.Ltd.
 35. William, A. (2019). *Teaching in a digital age* (2nd ed.). Retrieved from <https://opentextbc.ca/teachinginadigitala/ge/front-matter/introduction/>
 36. Wilson R. C., Guilford J. P., Christensen P. R. (1953). The measurement of

- individual differences in originality. *Psychol. Bull.* 50 362–370. 10.1037/h0060857 [PubMed] [CrossRef] [Google Scholar]
37. Wilson, R. C., Gulford, J. P., Christensen, P. R. & Dutt N. K. (1974). *Psychological foundation of education*. New Delhi: Doaba House.
38. Wilson, L. O. (2014). *Models of teaching*. Retrieved from <https://thesecondprinciple.com/essential-teaching-skills/models-of-teaching/>
39. Yamane, Taro. (1967). *Statistics: An Introductory Analysis*, 2nd Edition, New York: Harper and Row.