AWARENESS OF CONSTRUCTIVE TEACHING STRATEGIES AND CREATIVE THINKING AMONG SECONDARY SCHOOL TEACHERS

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Abstract

This study analyzes Awareness of Constructive Teaching Strategies and Creative Thinking among Secondary School Teachers from selected schools in and around Chennai. Adopting a descriptive survey method, the research involved 100 randomly selected secondary school teachers from various schools in the Chennai district. Data were collected using a standardized Constructive Teaching Strategies and Creative Thinking scale was constructed by the investigator under the guidance of the supervisor validated at significance levels of 0.05 and 0.01. The findings revealed that there exists a moderate level of Constructive Teaching Strategies and Creative Thinking among Secondary School Teachers.

Keywords: *Awareness, Constructive Teaching, Strategies, Creative Thinking, Leaning, Teachers.*

Introduction

In the 21st century classroom, the student should be active and creative irrespective of their different learning styles and Socio-economic background. These dynamics create a challenge for teachers and insist them to adopt innovative teaching techniques in the classroom. The Constructivist view of teaching and learning can point towards a number of different teaching practices. Constructivism is a philosophical process about how people learn and construct their own knowledge using previous experience. There are many “flavors” of Constructivism, but one prominent theorist known for Constructivist views is Jean Piaget who focused on how humans make meaning in relation to the interaction between their experiences and their ideas. Using the Constructivist teaching strategies the teacher requires being creative that ensure student’s participation which enables them to visualize, articulate, express, explain, interpret, and apply new knowledge. In addition the Constructivist teacher can facilitate a process of learning in which students are encouraged to be responsible and autonomous in their learning.

Need and Significance of the Study

Each student is unique and learns in different ways. The role of teacher is vital to mould the students by teaching in constructive classroom. Teachers are key factors who shape the learning environment and whose main tasks include encouraging students to learn. Some of the constructive teaching Strategies are experimental learning, classroom discussion, and question and answer methodology and hands on activities. These atmosphere having constructive ideas help to promote higher order thinking skills among the teachers to become a creative thinker which reflect in the performance of the students.

Hence the investigator wants to find out how the constructive teaching strategies and creative thinking are related from the perspectives of teachers.

Statement of the Problem

Constructivism is an emerging taught process in teaching and learning process. .Adopting constructive teaching strategies used to create higher order thinking skills to be creative. Creative skills are as much about attitude and self- confidence as about talent. Creativity is often less ordered, structured and predictable. From the above discussion the statement of the problem is "Awareness of Constructive Teaching Strategies and Creative Thinking among secondary school Teachers" from selected schools in and around Chennai.

Constructive Teaching Strategies

Constructive teaching strategy is the problem based teaching strategies used by the teachers in which students are trained how to learn by giving them the training to take initiative for their own learning experiences.

Creative Thinking

Creative thinking is a way to look at and solve problems from a different perspective, avoiding orthodox solutions and thinking outside the box. Creative thinking plays an important role among teachers and students. Teachers should be more creative for the development of students in learning

Objectives of the Study

1. To find out the level of Constructive Teaching Strategies among Secondary School Teachers
2. To find out the level of Creative Thinking among Secondary School Teachers
3. To find out significant difference between the based on Gender, Medium of instruction, Type of management, Age, Qualification of teachers, Years of experience, Subject handled do not differ significantly in their
   a) Constructive Teaching Strategies
   b) Creative Thinking
4. To find out significant relationship between the Constructive Teaching Strategies and Creative Thinking among Secondary School Teachers

Hypotheses of the Study

1. The level of Constructive Teaching Strategies among Secondary School Teachers is high.
2. The level of Creative Thinking among Secondary School Teachers is high.

3. There is no significant difference between the based on Gender, Medium of instruction, Type of management, Age, Qualification of teachers, Years of experience, Subject handled do not differ significantly in their
   a) Constructive Teaching Strategies
   b) Creative Thinking
4. There is no significant relationship between the Constructive Teaching Strategies and Creative Thinking among Secondary School Teachers

Research Design

Methodology

The study was through descriptive survey method of research.

Sample and sampling Techniques

A simple random sampling technique was adopted for the selections of Sample 100 secondary school teachers were taken for the present study.

Tools Used in the Present Study

To verify the hypotheses formulated in the study, the following tools were used.

- Constructive Teaching Strategies Rating Scale developed by the investigator and the Supervisor (2018).
- Creative Thinking Rating Scale also developed by the investigator and the Supervisor (2018).

Reliability

Reliability of a test may be defined as the consistency with which the test measure ever it measures. A test score is called reliable, when we have reason to believe to be and trust worthy. The concept of reliability suggests both stability and consistency of measurement. The r value was calculated by the split-half method. The reliability coefficient of five point scale on Constructive Teaching Strategies was 0.84 at 0.01 level of significant The reliability coefficient of five point scale on Creative Thinking was 0.81 at 0.01 level of significant

Validity

The validity of the test defined as the square root of reliability. The validity of the constructive teaching strategies has been assessed by computing the reliability index. In the present case, it has worked out to be r= 0.84=0.916. The validity of the creative thinking has been assessed by computing the reliability index. In the present case, it has worked out to be r= 0.81= 0.91.

Statistical Techniques

Suitable descriptive and inferential statistical techniques were used in the interpretation of the data to draw out a more meaningful picture of results from the collected data. In the present study the following statistical measures were used:

- Mean
- Standard Deviation
- t-test
- F-ratio
- Correlation

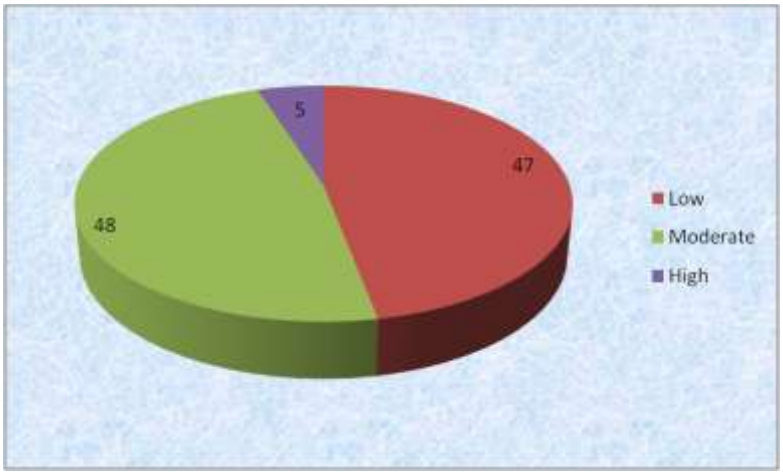
Major Findings of the Study

1. It is found that there exists a moderate level of Constructive Teaching Strategies among Secondary School Teachers.
2. It is found that there exists a moderate level of Creative Thinking among Secondary School Teachers.
3. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Gender.
4. It is found that there is no significant difference in the level of Creative Thinking based on Gender.
5. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Medium of instruction.
6. It is found that there is no significant difference in the level of Creative Thinking based on Medium of instruction.
7. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Type of School.
8. It is found that there exists a significant difference in the level of Creative Thinking based on Type of School.
9. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Age groups.
10. It is found that there exists a significant difference in the level of Creative Thinking based on Age groups.
11. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Qualification of teachers.
12. It is found that there is no significant difference in the level of Creative Thinking based on Qualification of teachers.
13. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Years of experience.
14. It is found that there exists a significant difference in the level of Creative Thinking based on Years of experience.

15. It is found that there is no significant difference in the level of Constructive Teaching Strategies based on Subjects handled.
16. It is found that there is no significant difference in the level of Creative Thinking based on Subjects handled.
17. It is found that there is a high level positive relationship between Constructive Teaching Strategies and Creative Thinking at significant levels.

Table 1Table Showing the Level of Constructive Teaching Strategies Frequency and Percentage for the Total Sample

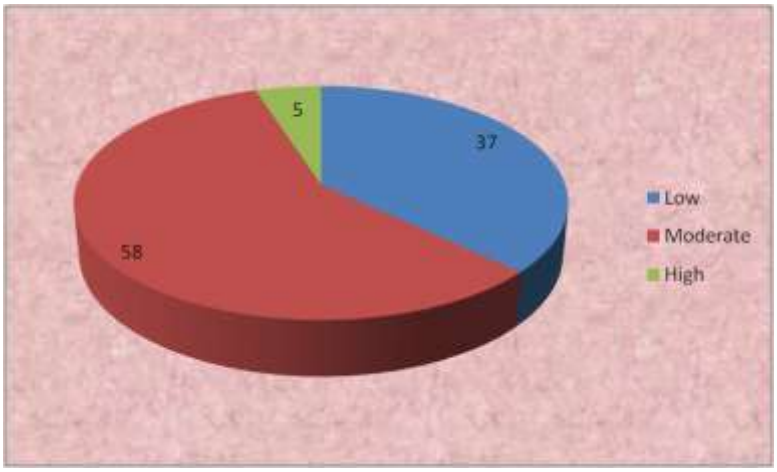
Level of Constructive Teaching Strategies	Frequency	Percentage
Low	47	47
Moderate	48	48
High	5	5
Total	100	100



Graph 1 Level of Constructive Teaching Strategies Frequency and Percentage for the total Sample

Table 2 Table Showing the Level of Creative Thinking Frequency and Percentage for the Total Sample

Level of Creative Thinking	Frequency	Percentage
Low	37	37
Moderate	58	58
High	5	5
Total	100	100



Graph 2 Table Showing the Level of Creative Thinking Frequency and Percentage for the Total Sample

Discussion

The analysis revealed no significant difference in both Constructive Teaching Strategies and Creative Thinking with respect to gender. However, the mean values indicated that female teachers tend to score higher in Constructive Teaching Strategies, likely due to their better adaptability to varied teaching methods and pedagogical practices. In contrast, male teachers demonstrated relatively higher levels of Creative Thinking, suggesting stronger individual idea generation and problem-solving abilities. These findings indicate that while gender may not statistically impact these constructs, different genders may exhibit strengths in different teaching aspects. There was no significant difference in either Constructive Teaching Strategies or Creative Thinking concerning the medium of instruction. Nonetheless, Tamil medium teachers exhibited slightly higher Constructive Teaching Strategies, possibly due to greater language fluency that facilitates instructional delivery. Conversely, English medium teachers showed better performance in Creative Thinking, which may be attributed to broader exposure to innovative educational resources and teaching materials available in English. The findings showed no significant difference in Constructive Teaching Strategies across school types. Government school teachers performed better in this area, which might reflect their need to adopt more engaging strategies to manage diverse classrooms. However, a significant difference was observed in Creative Thinking, with Government school teachers outperforming their peers. This could be due to the need for resourceful teaching in resource-constrained environments, thereby enhancing creativity. No significant difference was noted in Constructive Teaching Strategies across age groups. However, younger teachers (20–30 years) scored higher, suggesting that early-career teachers may be more receptive to modern, student-centered strategies. In contrast, a significant difference was observed in Creative Thinking, with younger teachers again scoring higher. This trend may reflect a generational shift, where younger teachers are more in tune with contemporary educational trends and technological tools that promote

creativity. Both variables Constructive Teaching Strategies and Creative Thinking showed no significant difference based on qualification. Nonetheless, postgraduate teachers scored higher in both constructs, implying that higher educational attainment may enhance a teacher's instructional quality and creative capabilities. This may be due to increased exposure to advanced pedagogy and critical thinking during postgraduate training. There was no significant difference in Constructive Teaching Strategies, although novice teachers (0–10 years) scored the highest. This suggests that recently trained teachers may bring fresh pedagogical practices into the classroom. A significant difference emerged in Creative Thinking, with the highest scores seen in teachers with 21–30 years of experience, possibly indicating that long-term exposure to teaching nurtures innovative thinking and adaptive strategies over time. No significant difference was found in either variable with respect to subjects handled. However, social science teachers displayed higher Constructive Teaching Strategies, potentially due to the nature of their content, which often requires interactive and discussion-based methods. Language teachers showed greater Creative Thinking, possibly because language teaching inherently involves interpretive, expressive, and imaginative skills.

Educational Implication

The finding that secondary school teachers demonstrate a moderate level of Constructive Teaching Strategies indicates a need for professional development programs focused on enhancing active learning, student-centered instruction, and inquiry-based teaching. Educational authorities should organize regular workshops, training, and reflective teaching practices to support teachers in adopting more constructivist approaches. The presence of a moderate level of Creative Thinking among teachers suggests that while creativity is present, it needs to be further nurtured. Teacher training programs should incorporate activities that stimulate divergent thinking, problem-solving, and innovation in teaching methods. The absence of significant differences in both Constructive Teaching Strategies and Creative Thinking based on gender implies that both male and female teachers exhibit similar competencies. This reinforces the notion of promoting equal professional development opportunities without gender bias. As no significant variation is found based on medium of instruction, it suggests that language (English or vernacular) does not influence teachers' use of constructive strategies or creative thinking. Hence, enhancement programs can be designed universally, without medium-specific customization. The uniformity in Constructive Teaching Strategies across different types of schools (government, private, aided) indicates that systemic changes may not be necessary, but targeted support within all school types is still beneficial. The variation in Creative Thinking among teachers from different school types suggests that institutional factors like school culture, autonomy, or resources may affect creativity. Policies must address disparities and provide equitable resources and motivational environments in all school settings. The finding that age does not significantly affect Constructive Teaching Strategies

implies that teaching strategies can be adopted and adapted across age groups. Therefore, training modules should focus on inclusivity across age ranges. The presence of differences in Creative Thinking by age group may indicate that younger or older teachers may need different forms of support. Tailored interventions focusing on experience-sharing, mentoring, and creative engagement are necessary. The lack of variation in both variables by educational qualification implies that higher degrees do not necessarily enhance Constructive Teaching or Creative Thinking. Therefore, emphasis should be placed on practical teaching experiences and continuous professional learning rather than just academic credentials. Differences in Creative Thinking based on experience could indicate that experience enhances or sometimes limits creative approaches. This highlights the need for reflection-based training and peer collaboration to sustain creativity among both novice and veteran teachers. The finding shows that the subject taught does not influence either Constructive Teaching Strategies or Creative Thinking. This supports the design of interdisciplinary training programs that promote creativity and active learning across all subject areas. The strong positive correlation between the two variables underlines the interdependence of teaching methods and teacher cognition. Encouraging creative thinking among teachers can enhance their ability to use constructivist strategies, and vice versa. Thus, integrated training focusing on both aspects is essential for improving overall instructional quality.

Conclusion

The present study provides valuable insights into the Constructive Teaching Strategies and Creative Thinking abilities of secondary school teachers. The findings reveal that both Constructive Teaching Strategies and Creative Thinking are present at a moderate level among the participants. No significant differences were observed in either Constructive Teaching Strategies or Creative Thinking based on gender, medium of instruction, qualification, years of experience (for teaching strategies), and subjects handled, suggesting a relatively uniform implementation of these pedagogical and cognitive attributes across these categories. However, the study highlights significant differences in Creative Thinking based on type of school, age group, and years of experience, indicating that institutional and experiential factors may influence the creative potential of teachers. Interestingly, no such variation was noted for Constructive Teaching Strategies across the same variables, suggesting that teaching strategies may be more stable and less influenced by demographic or contextual factors. A key finding of the study is the strong positive correlation between Constructive Teaching Strategies and Creative Thinking. This relationship underscores the interdependence of teaching approaches and cognitive creativity, emphasizing the need for professional development programs that foster both aspects simultaneously. The results call for targeted interventions and support mechanisms to enhance teachers' creative competencies while sustaining effective, constructivist instructional practices.

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