

Innovative Practices Adopted in Senior Secondary Schools by P.G.Ts in South Sikkim

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ABSTRACT

Innovative practices are purposefully organised and risk taking changes introduced into any school system to ensure efficiency and increased productivity. It is the introduction of new ideas, methods, strategies and techniques for doing things into the school system for the purpose of improving both internal and external efficiency of the system. The present study is an attempt to examine the innovative practices adopted in various Senior Secondary Schools in South district of Sikkim. For this purpose 5 Government Sen. Sec. Schools (2 from urban and 3 from rural areas) were selected as representation of the population. Further, Heads of the schools and teachers teaching Arts, Commerce and Science subjects were selected to collect data from. This study found that different kinds of innovative practices were adopted by schools such as ICT, group learning, teacher guardian concept, simulated library, special tutorials for slow learners in primary sections, subject base quiz in morning assembly, assembly reading, remedial classes, project work, field trips, model preparation and dramas and elocution. Further it was found that teachers do undertake training organised by SCERT, DIET, Education Department of the state government and ZIIEI, Delhi.

Keywords: Innovations, PGTs

I. INTRODUCTION

To innovate is to look beyond what we are currently doing and develop a novel idea that helps us to do our job in a new way. Education fosters innovation in society at large by developing the right skills to nurture critical thinking, creativity and imagination through appropriate teaching, and practices.

In education, innovation can appear as a new pedagogic theory, methodological approach, teaching technique, instructional tool, learning process or institutional structure that, when implemented, produces a significant change in teaching and learning which leads to better student learning. In other words, it is using a combination of various teaching strategies that are appropriate for the learners in order to ensure more effective teaching. The present generation classrooms need a totally different set of teaching tools and methods in order to insure that kids are inspired, motivated and engaged to learn in a conducive environment. In the era of international standards a critical need for new perspectives and innovative practices becomes very important and introducing new techniques and practices in the classroom teaching quality reaches a height of perfection.

II. REVIEW OF RELATED LITERATURE

There are numbers of studies that have investigated the different innovative practices adopted by teachers that makes an attempt to present an account of the critical role of education in human capital formation and the overall development of the society. The investigator has attempted to review some of the closely related existing in following paragraphs.

Beri and Sharma (2019) exposed in their study that some of the teacher-educators were not embedding ICT into practice during teaching-learning process due to certain reasons like lack of ICT training, technical-support and short of self-confidence in using ICT skills. P. Padma (2018) conferred that innovative teaching methodologies will lead to a learning society in which the creative and intellectual abilities of students will allow them to meet the goals of transformation and development. Peter Serdyukov (2017) mentioned that innovation can be directed towards progress in one or all aspects of the educational system and can be applied in any aspect of education that can make a positive impact on learning and learners. Kumari and D'Souza (2016) found in their study that ICT is used by teachers in secondary schools is average in both urban and rural secondary school

teachers. Anderson and Neri (2012), revealed that innovative teaching can involve virtual labs learning activities based on real – life problems learning environment with equipment, furnishings, materials and audio – visual resources and learning guides for students and the teachers.

III. NEED AND JUSTIFICATION OF THE STUDY

Innovation is to be regarded as an instrument of necessary and positive change. Any human activity needs constant innovation to remain sustainable. Raising the quality and scale of innovations in education will positively affect education itself and benefit the whole society. The search for innovative teaching strategies are natural of the fact that different situations, teaching topics, learners' cognitive readiness, concepts being taught skills intended to be developed in learners demand for different teaching approaches to be used. It is through such kinds of innovative practices that the teaching profession renews and recreates itself into a variety of educational professionals who will lead schools into becoming learning organizations of 21st century. Henceforth, to conduct research would be crucial for all the schools as well as the teachers in order to make them aware and conscious of various teaching practices.

This paper is an attempt to find out the present status of innovative practices adopted by teachers in South district of Sikkim, further it will also analyze the importance of the work carried out and achievements accomplished by such schools.

IV. OPERATIONAL DEFINITIONS OF KEY THE TERMS USED

- i. *Innovation*: It is the introduction of new ideas, methods, strategies and techniques to be used in teaching-learning process in the school system.
- ii. *P.G.Ts*: Teachers who teaches in Classes XI and XII in the Government Senior Secondary Schools of Sikkim. Their educational qualification includes Post graduation with BEd and STET/ TET.

V. RESEARCH QUESTIONS

- i. What is the status of innovative practices adopted by Senior Secondary School of South Sikkim?
- ii. What is the status of teachers attended training on innovative teaching-learning?
- iii. Is there any difference on innovative teaching practices adopted by science and arts teachers of Senior Secondary Schools of South Sikkim?

VI. OBJECTIVES OF THE STUDY

- i. To identify the status of innovative practices adopted by Senior Secondary School of South Sikkim.
- ii. To find out the status of teachers attended training on innovative teaching-learning.
- iii. To find out the innovative teaching practices adopted by Science, Arts and Commerce teachers of Senior Secondary Schools of South Sikkim.
- iv. To provide suggestions and recommendations for further improvement in innovative practices in Govt. Senior Secondary School.

VII. DELIMITATION OF THE STUDY

This study is delimited to the principals and teachers teaching subjects Arts, Science and Commerce in classes XI and XII of government schools of South district of Sikkim.

VIII. METHODOLOGY

For the present study, descriptive survey method of research has been used. The sample of the study is 5 Government Senior Secondary Schools of South district of Sikkim which includes 2 schools from urban and 3 schools and rural area and representation of the target population includes Heads of schools and teacher teaching Arts, Science and Commerce streams. This sample was drawn out of the population of 12 senior secondary schools in South district of Sikkim having all the three streams, i.e, Arts, Science and Commerce.

To collect data, the investigator used interview and discussion methods and also used self constructed questionnaire to satisfy the objectives of the study undertaken.

IX. DATA ANALYSIS AND INTERPRETATION

This section deals with analysis of data and interpretation as per the research questions and research objectives of the study.

i.

Table: 1
Awareness of the concept innovation

Stream	No. of PGTs	Awareness of the concept of innovation (in %)	
		Yes	No
Commerce	09	100	0
Arts	25	100	0
Science	11	100	0

In the query made to teachers and principals regarding to what extent they are aware of innovative teaching learning practices, 100% of teachers and heads of schools head responded that they are aware of it.

ii.

Table: 2
Kinds of innovations adopted by schools

Sl. No.	Types of Innovation	in %
1	Use of ICT	41
2	Group learning	26
3	Teacher guardian concept	5
4	Simulated library	5
5	Special tutorials to slow learners in primary sections	5
6	Subject based quiz in morning assembly	5
7	Assembly reading	5
8	Remedial classes	3
9	Class project work	3
10	Field trips	1

The above table showed that out of given different types of innovative practices 41% of the schools are making use of ICT and 26% of the schools have adopted group learning as innovative practices in the schools. Only 1% is engaged in field trips.

iii.

Table: 3
Reasons for adopting such innovations in schools

Sl. No.	Reasons	in %
1	To arouse interest	37
2	Low performance	16
3	To do practical work	11
4	To make teaching learning joyful	16
5	Motivation	10
6	For developing critical thinking	10

The above table shows that among the given reasons for adopting innovative practices in the school, to arouse the interest, to ensure students participation and to give support to children in their learning is 37% which is the maximum. Whereas only 10% mentioned reason is to motivate students and teachers and for developing critical thinking among the learners.

iv.

Table: 4
Status of teachers (stream wise) attended training on innovative teaching learning

Workshops/ training provided by	Streams		
	Arts	Science	Commerce
SCERT	15	20	5
DIET	5	5	5
Education Department, Namchi, South Sikkim	5	5	3
ZIIEI, Delhi	5	20	7

The above table shows that maximum numbers of workshops and trainings are provided by SCERT to PGTs of Arts and Science, and for Commerce PGTs it is ZIIEI, Delhi.

v.

Table: 5
Motivation to adopt innovative practices

Sl. No.	Motivation	in %
1	Students' curiosity in learning	45
2	To impart quality education	35
3	Self learning	20

The above table shows that 45% of the teachers were motivated by students' curiosity in learning to adopt innovative practices, whereas 35% were motivated to impart quality education. Only 20% of teachers were motivated by self learning.

vi. **Innovative teaching practices adopted by Science, Arts and Commerce teachers:**

It was since 2009 that the classrooms in Sikkim have become more learners' friendly, conducive and print-rich. It is through such kinds of innovative practices that the teaching profession renews and recreates itself into a variety of educational professionals who will lead schools into becoming learning organizations of the 21st century.

vii.

Table: 7
Use of innovative methods/ practices while transacting the contents in the classroom

Stream	Number of PGTs	Use of innovative methods/ practices while transacting the contents in the classroom	
		Yes	No
Arts	25	89	11
Science	11	100	0
Commerce	9	71	29

The above table shows that 100% of science teachers are using innovative methods/ practices while transacting the contents in the classroom. Teachers from arts stream and commerce stream are using innovative methods 89% and 71% respectively.

viii.

Table: 8
Selected areas of innovative teaching-learning practices adopted by teachers

Sl. No.	Areas in %	Streams		
		Arts	Science	Commerce
1	Classroom management	94	90	90
2	Maintaining cleanliness	84	86	85
3	Prepare TLMs for classes	72	76	70
4	Adopted new teaching approaches	72	79	75
5	Involvement of all students in classroom activities	91	97	93
6	Use of information and communication technology (ICT)	78	86	86
7	Conduct action research	20	35	30
8	Life skills education during curriculum transaction	87	90	86
9	Practical work related to theory courses	75	99	80

From the above given table it is clear that 94% of teachers from arts stream have adopted classroom management area as innovative practices whereas 99% of science teachers have adopted practical work related to theory courses. Teachers from commerce stream are 93% who have involves all students in classroom activities as innovative teaching-learning practices.

ix.

Table: 9

Orientation programmes or workshops being organised in the school for the development of practical work

Any orientation programmes or workshops are being organised in your schools for the development of practical work. (Self learning materials/ institutional materials, teaching aid preparation of blue print etc).			
Stream	No. of PGTs	Yes (in %)	No (in %)
Arts	25	44	56
Science	11	71	29
Commerce	09	43	57

It has been evident from the above table that maximum of science (71%) teachers have confirmed that they are being provided with orientation programmes and workshops where as arts (44%) and commerce (43%) teachers have availed orientation programmes and workshops to enhance their teaching skills.

x.

Table: 10
Positive experiences while implementing the innovative practices

Sl. No.	Positive experiences	Remarks (in %)
1	Better student learning	57
2	Improvement in teaching learning strategy	21
3	Joyful learning	16
4	No response	06

In response to query in regard to positive experiences while implementing the innovative teaching learning practices 57% of the teachers from all the streams responded that there was a better student learning, 21% mentioned about the improvement in teaching learning strategy, 16% mentioned about joyful learning, whereas only 6% of the respondents did not provide any information.

xi.

Table: 11
Academic improvement

Sl. No.	Academic improvement	Remarks (in %)
1	Better understanding and learning among students	53
2	Absentee rate were checked	32
3	Drop-out rate reduced	10
4	Parents were motivated	05

The above table shows that maximum of 53% teachers confirmed that there were better understanding and learning among students also the absentee rate were checked which were confirmed by 32% of teachers.

X. FINDINGS OF THE STUDY

The major findings of the study are:

1. This study found that all the teachers and heads of Senior Secondary Schools in South Sikkim are aware of innovative practices. It was also found that the implementation of these innovative practice adopted by these schools are going in slow pace. Further it was found that the majority of schools here are located in rural areas and these schools are doing better than schools in urban areas because teachers here are able to give individual attention to students as their enrolment is low.
2. It was found that different agencies like SCERT, DIET, Education Department of Namchi, South District and ZIIEI, Delhi are providing trainings/workshops to teachers but majority of the teachers from all the three streams are not able to avail the facilities. As compared to Science and Arts teachers, Commerce teachers are left out during such trainings/ workshops.
3. It was found that teachers from all the streams are using innovative practices, but comparatively maximum teachers from Science stream are adopting and practicing innovative practices while transacting contents in the classroom followed by teachers from Arts stream and teachers from Commerce Stream are utilizing these practices at minimum.

XI. DISCUSSIONS AND SUGGESTIONS

1. In today's world, to meet the gap between the modern education and traditional education the Principals and teachers of Government Senior Secondary Schools of South District are using various innovative practices. The reasons for adopting innovative practices are to arouse interest among the students, to check the low performance of the students, to do practical work, to make teaching learning joyful, for motivation and also for developing critical thinking among the students. Schools in all localities (urban/ rural) should initiate in utilization of innovative practices in teaching-learning process positively. Teachers should be encouraged to develop interest in the use of ICT tools keeping in view of the present situation. Due to Covid-19, there is no option without online education. They should be trained in the use of these ICT tools.

2. Trainings and workshops give teachers a great understanding of their responsibilities and the knowledge and skills they need to do the job. These trainings will also enhance their confidence which can improve their overall performance. In Sikkim, school teachers from some streams are availing more trainings/ workshops over teachers from other streams.
Concern government bodies may organise trainings and workshops for all the teachers from all streams (Arts, Science & Commerce) to provide equal opportunities to everyone.
3. Since 2009 that the classrooms in Sikkim have become more learners' friendly, conducive and print-rich. It is through innovative practices that the teaching profession renews and recreates itself into a variety of educational professionals who will lead schools into becoming learning organizations of the 21st century. To make teaching-learning process effective, teachers have adopted practices like classroom management, maintaining cleanliness, preparing TLMs, adopted new teaching approaches after attending trainings/ workshops. Teachers also felt positive experiences while implementing innovative practices and also witnessed academic improvement among students.
To maintain positive energy in teaching-learning situation there is a need to establish smart classroom in every school, uninterrupted flow of electricity is a must, proper seating arrangement and well ventilated classroom is considerable.

XII. CONCLUSION

Having limited focus to the principals and teachers teaching in streams Arts, Science and Commerce in classes XI and XII of government schools of South district of Sikkim, this study can act as a guiding tool to further researchers who are interested in the similar studies by taking the entire schools in Sikkim as population of the study, another study would be on attitude of teachers towards implementing innovative practices in classroom. A comparative study can also be done on innovative practices adopted by private schools and government schools of Sikkim.

Innovation is the process of developing an idea into a creative action. In order to develop innovations we need to have a new environment that encourages innovativeness among the teachers. Innovations could help improve institutional reforms and encourage creative ways of enhancing capacities of educational functionaries.

XIII. REFERENCES

- [1]. Anderson, R., & Neri, L. (1990). *Reliability- Centred Maintenance: Management and Engineering Methods*. Netherlands: Springer.
- [2]. Bhatia, J. K. (2011). Use of Electronic Resources in Degree College Libraries in Chandigarh. *DESIDOC Journal of Library & Information Technology*, 480-484.
- [3]. Jesa, M., & E. V., N. (2017). Teaching Strategies Adopted by Teachers at Higher Education Level in Kerala: A Research Report. *Higher Education for the Future*, 4-11.
- [4]. Lee, G. C., & Lee, P, L. (2015). Data Structures in Flipped Classroom: Students' Effort and Preference. *2015 International Conference on Learning and Teaching in Computing and Engineering* (pp. 152-155). Taipei, Taiwan : Institute of Electrical and Electronics Engineers.
- [5]. Masino, S., & Nino-Zarazua, M. (2016). What works to improve the quality of students learning in developing countries? *International Journal of Educational Development*, 53-65.
- [6]. Naz, F., & Murad, H. S. (2017). Innovative Teaching Has a Positive Impact on the Performance of Divers Students. *SAGE Open*, 1-8.
- [7]. Pandey, A., & Pandey, A. K. (2020). ICT in Teaching and Learning: An Indian Scene. *Journal of Critical Review*, 861-865.
- [8]. Sengupta, A., & Tyagi, H. K. (2016). Teaching Excellence and Innovative Practices: A Cast Study of National Awardee Teachers of India. *Journal of Education and Practice*, 48-53.
- [9]. Serdyukov, P. (2017). Innovation in Education: what works, what doesn't work and what to do about it? *Journal of Research in Innovative Teaching & Learning*, 4-33.
- [10]. Shanmugam, A. P. (2017). Information Seeking Behaviour of Students in Digital Environment: A Case Study. In *Issues, Challenges and Opportunities in Electronic Resource Management for Students* (pp. 207-209). researchgate.
- [11]. Ummah, N., Sumardi, Marjono, & Hartono, F. (2020). Teacher Perspective: Innovative, Adaptive, and Responsive Instructional Design Aimed at Life Skills. *IOP Conference Series: Earth and Environmental Science* (pp. 1-8). IOP Publishing.

- [12]. Yorke, M., & Thomas, L. (2010). Improving the Retention of Students from Lower Socio-economic Groups. *Journal of Higher Education Policy and Management*, 63-74.

