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"Shaikshik Parisamvad (An International Journal of Education)" -SPIJE is a half-yearly, refereed journal of Education. It is a bilingual (Hindi and English) journal published by the "Alumni Association of Education, B.H.U"(AAE,BHU), Faculty of Education, Banaras Hindu University, Varanasi, Uttar Pradesh, India. The objective of this journal is to generate a healthy dialogue in frontier areas of Education amongst educators globally. It is targeted to serve as an academic forum for teachers, teacher educators, educational policy makers, administrators, research workers etc. in Education and related areas.

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Dedicated to our founder
Bharat Ratna Pandit Madan Mohan Malviya

Editorial

The educational scenario presently is much vibrant with the efforts of realizing the vision of NEP 2020. Every institution and educational bodies are in stride to fix the modalities and do the essential preparations for the effective implementation of NEP goals. In this context, a lot of knowledge inputs shall be needed to strengthen the knowledge base so that effective transformation may be done.

The national scenario is also vivacious with gearing up the efforts for achieving Viksitbharat@2047. No national reform can be achieved without the serious involvement of educational agencies. The participation and involvement of all educational stakeholders will be the key to direct efforts towards achieving the goals of Viksitbharat@2047.

India's educational system is one of the largest systems in the world, a huge demand and proportionate supply is needed to achieve the goals and fulfill the task in the context of large diversity in the country like India. The population of the country is a threat to fulfil such huge demand at the same time it's a big worth that a large pool of human resource resides in Indian soil. There have been dedicated efforts of teachers in all sectors of human development that today India and its economy is scaling new heights.

Under such backdrop, the present issue of SPIJE is bringing out its new Volume filled with lot of hope and dedication that knowledge provided by the esteemed authors shall enlighten a large academic fraternity to dedicate their efforts towards national goals.

The collection of the paper express myriad of different area of significance in present educational scenario.

The issue of scientific literacy has been explored among pre service teachers in one of the papers where an important significant goal i.e. sustainable happiness has also been addressed in terms of its pedagogical implications. Taking the debate of pedagogy ahead several of its reforms have been discussed in the domain of teacher education.

The present age is characterized by digital revolution, it has direct bearing to educational sector in such context the dynamics of teaching has been discussed in one of the papers of this volume. Innovation in pedagogical practices is the demand of hour, in such backdrop a sound knowledge base related to cooperative learning has been provided in one of the papers. In other significant efforts the concept of OOBE was analyzed along with text book content analysis in context of inclusive education. The practice of disciplining the students also need to understand in comprehensive spectrum, it has been highlighted in one of empirical studies in the journal studying the perception of it major stakeholder i.e. students.

In this way, the present volume of the journal addresses a large body of knowledge which will definitely strengthen the knowledge and understanding of the academic fraternity providing deep insight to work further in the area.

With high optimism I put forward this volume and express happiness and lot of satisfaction that the entire academic fraternity is working tirelessly to advance and refine knowledge base.

I convey my gratitude and thanks to entire members of editorial board for this painstaking effort to bring such refinement in the issue at the same time I congratulate all the authors of the papers that their idea being validated in a larger forum. I hope they will continue their effort to serve the discipline of teacher education with same zeal and enthusiasm.

Jai hind

Prof. Seema Singh
(Managing Editor)

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Study of Scientific Literacy among Pre-Service Elementary and Secondary Science Teachers

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Abstract

Scientific literacy is a skill that enables an individual to think, participate, and come up with some vision and decision for any social issue or problem. The present descriptive study was conducted to gauge scientific literacy, its existing level among pre-service elementary and secondary science teachers, and their perception of and attitude towards science. By random sampling, one DIET of Delhi and seven B.Ed. institutions affiliated with GGSIP University, Delhi, were selected. The research tools were administered to 33 pre-service elementary science teachers pursuing a D.El.Ed. course and 95 pre-service secondary science teachers pursuing a B.Ed. course. Data analysis showed that pre-service secondary science teachers had a significantly higher level of scientific literacy than pre-service elementary science teachers. The greater academic exposure of pre-service secondary science teachers supported them in developing a better perception and positive attitude toward science. The study had educational implications for concerned stakeholders as well.

Keywords: *Scientific Literacy, Science Education, Pre-service Secondary Science Teachers, Pre-service Elementary Science Teachers*

The past few decades have witnessed an exponential advance in science and spectacular hikes in industries and technology. But today's world is in the grip of global warming, terrorism, poverty, unemployment, etc. Education, as a social tool, plays a significant role in keeping a community aware of its own issues and problems and supports addressing the issues or resolving the problems based on scientific background (Sultan et al., 2018). The people of a modern society are supposed to have scientific literacy (Hazen & Trefil, 1991). If an individual is well acquainted with the concept of science, technology and society then he/she is scientifically literate. In general terms, scientific literacy refers to the tendency on the part of individuals to think, participate, and come up with some vision and decision with respect to any social issue, practice, or problem, etc. The appreciation of processes, ethics, and values associated with the nature of science encourages scientifically literate individuals to contribute more to social welfare (Dawson & Venville, 2009). A scientifically literate person thinks and asks questions about the happenings in society and, on curious measures, derives an answer or explanation for them. It supports the person in solving daily problems by using scientific information.

Science, as a discipline, refers to the literature of knowledge collected through experimentation and observation. The nature of science is process as well as product. The product nature of science means the conclusion drawn from any aspect, phenomenon, or problem under consideration. On the other side, the process nature of science refers to the ways of arriving at the conclusions drawn (Mohan, 2007). The process nature of science, rather than its product nature, keeps the learners cognitively more active. In formal education, fostering scientific literacy as a skill amongst the learners is a major goal of science education (Kumar and Banerjee, 2018), and hence, in the long run, a scientifically literate community is born (Sultan et al., 2018). Science education as an

integrated concept links science with educational psychology. Sound pedagogical and subject knowledge support the teachers in promoting scientific literacy among the students. Science teachers play a crucial role in preparing a scientifically literate community of students (Chin, 2005).

In schools, though the emphasis is on developing 21st-century skills among students, it cannot be achieved unless and until the school curriculum is updated. Still, the students are taught through rote memorization to stand out in the examination. Academic achievement, in terms of marks obtained, is not a reflection of scientific literacy among the students. In Delhi, less than one-third (27.11%) of government schools offer a science stream at the senior secondary school level (Sharma, 2017). School administrators and government officials explain the fall in the number of students meeting the eligibility criteria to opt for the science stream at the senior secondary school level. But on the other side, since last decade, government schools have considerably improved their CBSE results for class X. Administrative viability is another obstacle that prevents the stream specialization in science at senior secondary school, as the minimum strength of students opting for science is not available. At national level, 33% students opt science stream as senior secondary school level (Choudhary, 2018) and it gives opportunity to science educators to cheer. But also, at the national level, around one-fifth (21.8%) of higher secondary schools offer a science stream.

Thus, on one side, the pre-service science teachers themselves don't have the desired knowledge base or the necessary pedagogical skills to facilitate the conceptual learning for the students. On the other side, the deterioration in the number of students opting for the science stream and the number of such senior secondary schools that offer science at the senior secondary level have raised an alarm and developed a concern. So, to address the issue, the present study was conducted by the investigator to gauge the scientific literacy and its existing level among pre-service science teachers, their perception of science as a body of knowledge itself, and how the infrastructural structure of the teacher education institutions and science teacher educators themselves motivates them for the discipline.

Review of Related Literature

At pre-service level, elementary science teachers had below average to average levels of scientific literacy which required further improvement (Cavas et al, 2013 and Karamstafaoglu et al, 2013). But satisfactory levels of scientific literacy among pre-service elementary science teachers have also been reported (Sultan et al., 2018). Other studies have found that pre-service science teachers in a four-year elementary teacher education program demonstrated the highest levels of scientific literacy in the fourth year only (Altun-Yalcin et al., 2011; Ozdemir, 2010). Most of the studies conducted to gauge the scientific literacy amongst pre-service science teachers in four-year elementary teacher education programs have applied quantitative research approaches (Chin, 2005; Bacanak & Gokdere, 2009; Ozdemir, 2010). Teacher education curriculum needs to be upgraded by incorporating themes, topics, etc. that address scientific literacy (Karamstafaoglu et al., 2013). At the pre-service teacher education level, a positive correlation between scientific literacy and self-efficacy has been found (Chin, 2005; Cavas et al., 2013; Sultan et al., 2018).

Based on the related literature reviewed and to address the issue of scientific literacy among pre-service science teachers at teacher education institutions, the following research questions were formulated by the investigator:

Research Questions

1. How does scientific literacy support pre-service science teachers in thinking about the social issues and problems around them?

2. How do pre-service science teachers engage themselves with science?
3. How do pre-service science teachers, themselves, perceive science as an academic subject?
4. What scholastic as well as co-scholastic factors lead pre-service science teachers to develop their perception of science as a discipline?

Research Objectives

To explore the above research questions, the following research objectives were framed by the investigator:

1. To study the scientific literacy among pre-service elementary and secondary science teachers.
2. To compare the scientific literacy of pre-service elementary and secondary science teachers.
3. To explore the perceptions of pre-service elementary and secondary science teachers toward science.
4. To gauge the attitude of pre-service elementary and secondary science teachers towards science.

Hypotheses

For research objectives (ii) and (iv), the following null hypotheses (H_{01} and H_{02}), respectively, were formulated and may be stated as:

H_{01}: There is no significant difference between the scientific literacy of pre-service elementary and secondary science teachers.

H_{02}: There is no significant difference between the attitude of pre-service elementary and secondary science teachers.

Methodology

To explore a phenomena under consideration with respect to its current status, the descriptive survey research design was employed by the investigator.

Sample and Sampling Technique

Guru Gobind Singh Indraprastha University (GGSIP University) is a state university established by the Government of Delhi that offers professional courses to students. Education as a professional discipline is also offered by the university through the Bachelor of Education (B.Ed.) course in its 23 affiliated secondary teacher education institutions. Keeping in view the administrative, academic, and time constraints, random sampling was exercised. For exploring the scientific literacy among pre-service secondary science teachers, seven (7) secondary teacher education institutions of GGSIP University, Delhi, were selected as the sample of the study. From these randomly selected 7 secondary teacher education institutions, the research tools were administered to the 95 pre-service secondary science teachers in the fourth semester of the B.Ed. course.

Since, as per the National Council for Teacher Education (NCTE), the eligibility criteria for admission in a B.Ed. course allow a student with a Diploma in Elementary Education (D.El.Ed.) and an undergraduate degree, such students were also selected as a sample for the study. But in the randomly selected sample of 7 secondary teacher education institutions of GGSIP University, Delhi, the investigator did not find any student with this qualification, which is B.Sc. plus D.El.Ed. and now doing B.Ed. Thus, it was decided to select pre-service elementary science teachers at the pre-

service level from the District Institute of Education and Training (DIET) of Delhi State. There are nine (9) DIETs in Delhi, and one DIET was randomly selected. From that randomly selected DIET, all the pre-service elementary science teachers in their second year were selected as the final sample of the study. In the randomly selected DIET, there were thirty-three (33) pre-service elementary science teachers. and all of them were selected for data collection.

Tools for Data Collection

The following research tools were developed by the investigator for data collection:

An educational test for assessing the scientific literacy of pre-service science teachers (both elementary and secondary science teachers) was developed by the investigator himself. The content and validity of the test were established after consultation with subject experts. The subject experts were also provided with the objectives of the educational test. After deliberation with them, their suggestions were incorporated into the initial draft of the test. The final draft of the educational test for assessing scientific literacy had seventeen questions and was worth twenty marks. The duration of the educational test was twenty minutes.

A structured interview schedule was also developed to explore the perceptions of pre-service elementary and secondary science teachers. Its content validity was established through consultation with experts in science and education. Their necessary suggestions were incorporated into the initial draft of the interview schedule, and thus a final draft of the schedule emerged. A 5-point Likert scale was developed by the investigator to gauge the attitude of pre-service elementary and secondary science teachers towards science. Its content validity was also established, and its reliability by Cron-Batch Alpha was established and found to be 0.72.

Thus, all of these research tools were used for data collection after establishing their content validity and reliability.

Results and Discussion

Suitable qualitative as well as quantitative approaches for data analysis were used. The content analysis was the qualitative approach for the data analysis. The t-test was employed as a quantitative approach for the data analysis. So, a mixed research method was used.

(i) To study the scientific literacy among pre-service elementary and secondary science teachers.

To explore the above objective, an educational test for assessing scientific literacy was administered by the investigator to a randomly selected sample. The corresponding statistics are shown in Table 1.

Table 1

The mean and standard deviation of the scientific literacy scores of pre-service elementary and secondary science teachers

	N	M	σ	M+ σ	M- σ
Pre-service elementary science teachers	33	7	2.29	9.29	4.71
Pre-service secondary science teachers	95	14.46	2.69	17.15	11.77

M= mean; **σ** = standard deviation

The score distribution of the scientific literacy test was further subjected to calculations for sorting out the high achievers (HA), average achievers (AA), and low achievers (LA) among the sample. Table 2 shows high achievers, average achievers, and low achievers among the pre-service elementary and secondary science teachers.

Table 2

Levels of scientific literacy among pre-service elementary and secondary science teachers

	N	HA	AA	LA
Pre-service elementary science teachers	33	04 (12.18%)	27 (81.81%)	02 (6.06%)
Pre-service secondary science teachers	95	15 (15.78%)	69 (72.63%)	11(11.57%)

Table 2 shows that, comparatively, pre-service secondary science teachers had higher achievers (15.78%) with respect to the scientific literacy test than pre-service elementary science teachers (12.18%). A plausible reason for this finding may be the greater interest of the pre-service secondary science teachers in science subjects.

(ii) To compare the scientific literacy of pre-service elementary and secondary science teachers.

Table 3

t-test for the scientific literacy of pre-service elementary and secondary science teachers

	N	M	б	$б_d$	D	t value
Pre-service elementary science teachers	33	7	2.29	0.518	7.46	14.40#
Pre-service secondary science teachers	95	14.46	2.69			

*=.05 level of significance; #=.01. level of significance

M= mean; ? = standard deviation; ? d = standard error of the difference between the means; D= difference between the means

Table 3 shows that there is a significant difference in the achievement of the scientific literacy test in favor of pre-service secondary science teachers. The plausible reason for this finding may be the greater conceptual understanding and knowledge of pre-service secondary science teachers than pre-service elementary science teachers.

(iii) To explore the perceptions of pre-service elementary and secondary science teachers toward science.

To explore this research objective, a structured interview was conducted with pre-service elementary and secondary science teachers. A third of the sample for both, that is, pre-service elementary science teachers (11 students) and pre-service secondary science teachers (33 students), were randomly selected as interviewees. The following sub-section shows the content analysis of the

responses of the pre-service elementary and secondary science teachers.

What is Science for youϬ

Data Analysis: About three-fourths (75%) of the pre-service elementary science teachers responded that for them, science is a subject that requires logic and reasoning. It requires an in-depth study of the content. One-fourth (25%) were of the view that science gives a way to enter the professional world of medicine and engineering.

On asking this question, the pre-service secondary teachers responded with diverse views, which can be categorized into some heads. For example, about one-third (34%) of the respondents interviewed were of the view that for them, science is a curiosity that provides opportunities to explore the world around them. Science is everything, and everything involves science. About one-fourth (24%) of the respondents opined that everything comprises the environment, human body, animals, electronics, matter, etc. *Science is a way to explore the world,* as some respondents said. How do things happen around us? Science is more than a subject to read, understand, and do. It helps to find the facts behind a phenomenon. One respondent also asserted that *Vigyan humme sochna sikhata hai* (science trains us to think). Science trains the mind to think and helps to probe the process in hand. Science equips man to give back to society and support the developmental aspects of society. About two-fifths (40%) of the respondents reflected that in science, we explore, search, and research. Science is a body of knowledge that comprises facts, laws, principles, and theories in which we experiment, do practicals, activities, etc. The knowledge gained through science can also be challenged, as nothing is absolutely true or permanent. Science is open for criticism and can be debated, and this is the beauty of science that gives it a different place among all the subjects.

If given an opportunity right now, would you like to become a ScientistϬ

Interpretation: Qualitatively, pre-service elementary science teachers gave shallow responses. On the other side, for the majority of the pre-service secondary science teachers, science is a process as well as a product; that is, science is a body of knowledge (product approach), and science is activity-based, and these activities help in exploring the knowledge (process approach). The plausible reason for such responses may be the greater exposure of pre-service secondary science teachers to the nature of science in their graduate and post-graduate science programs, where they explored the science content in depth and performed practicals and experiments. This deep level of study of science as a subject facilitated their development of these kinds of opinions. However, the rest of the respondents who asserted that science helps them to explore and everything around them is science were also correct, but the basic notion of science to establish its nature as a subject is its process and product nature, which the majority of respondents reflected.

Data Analysis: About four-fifths (80%)of the pre-service elementary science teachers responded negatively, as they solely wanted to pursue the teaching career. The rest of the one-fifth (20%) could not answer this item.

About nine-tenths (91%) of the pre-service secondary science teachers asserted positively to this question, as they were ready to accept the challenge of this profession. They showed self-confidence and had satisfactory academic achievement in their graduate and post-graduate science programs. They also had the self-confidence to explore the subject with the required skills. They

wanted to serve society, and by being scientists, they could do so. The remaining respondents, or about one-tenth (9%) of the total respondents, did not want to pursue the profession of scientist. On an in-depth probe, it was found that in graduate or post-graduate science programs, they did not perform very well. Academically, though they were not so meritorious, they scored satisfactorily to teach at the school level. They were firm in their desire to be teachers, as they had the sufficient knowledge base required for being a school teacher.

Interpretation: Science learning had motivated the majority of the pre-service secondary science teachers to academically and professionally go higher and serve society by being scientists. For teaching, the respondents had enough knowledge base to serve in schools. On the other side, the pre-service elementary science teachers had exposure to the science stream up to the intermediate stage only, after which they started pursuing a two-year diploma course in teacher education. So, their little exposure to science courses kept them restricted in asserting that they were somewhat more flexible for this item.

What do you like most about Science as a subjectϬ

Data Analysis: The pre-service elementary science teachers responded that they liked the science subject as a whole, which is physics, chemistry, and biology, as they had studied these subjects up to intermediate level only. While responding to this item, the pre-service secondary science teachers exercised their choice as the subject that they studied at graduation and/or post-graduation level, such as botany, chemistry, physiology, zoology, physics, biotechnology, etc. The primary reason for this might be the opportunity to explore and experiment with that subject choice. Also, conceptual clarity and illustration, citations, exemplifications, etc. enriched their learning and motivated them to respond accordingly.

Interpretation: Conceptual learning and enrichment that is a better teaching-learning scenario, appropriate laboratory activities, etc. supported the pre-service secondary science teachers to exercise their choice of liking in science as a subject. On the other side, with respect to their likings, the pre-service elementary science teachers could respond narrowly due to their less academic exposure.

Would you recommend the students opt for Science courses at the senior secondary level Please elaborateϬ

Data Analysis: All the respondents who are pre-service elementary and secondary science teachers unanimously responded that they will motivate the students to opt for science courses at the senior secondary level, but they should also be interested in the same. Without interest, it is useless to force the students to pursue some course, as it may cause stress amongst them and result in drop-offs from that course and migration to other courses at the college level.

Interpretation: The pre-service elementary and secondary teachers have realized the significance of intrinsic motivation in learning, and hence they agreed that they would inspire the students to opt for science courses at the senior secondary level only if they had an interest in studying this subject domain.

What difference do you find between Science subjects at the intermediate or degree level and now at the D.El.Ed. or B.Ed. levelϬ

Data Analysis: Pre-service elementary science teachers expressed their views that, at the

intermediate level, there is an in-depth study of science such as physics, chemistry, and biology. However, laboratory experiments are not so frequently conducted. At the D.El.Ed.level, there is a focus on teaching methodology.

For this item, the pre-service secondary science teachers also responded that at their degree level of science, which is B.Sc., they learned in-depth and studied the subject exhaustively as concepts, facts, laws, principles, theories, etc. were taught with the support of experiments and practicals in the laboratories. Better library facilities catalyzed their learning at this level.

At the B.Ed. level, they asserted that they learned to implement their learning through the pedagogy taught, the teaching-practice phase, etc. However, they also realized that they were not diagnosed for their misconceptions pertaining to science concepts, and if they go on teaching with this kind of misconception, it may academically spoil future generations.

Interpretation: At intermediate, graduation, or higher levels, there is a focus on conceptual learning and enrichment, but at the D.El.Ed. and B.Ed. levels, the pre-service elementary and secondary science teachers are taught teaching methodology, respectively.

Overall Interpretation: The greater academic exposure of pre-service secondary science teachers (graduate and postgraduate levels) in comparison to pre-service elementary science teachers (intermediate level only) gave the former an upper hand to assert themselves deeper than the latter.

(iv) To gauge the attitude of pre-service elementary and secondary science teachers towards science.

To explore this objective, a 5-point Likert scale was administered by the investigator to a selected sample of pre-service elementary and secondary science teachers. Table 4 shows the statistical figures corresponding to the significance of the difference between the attitudes of pre-service elementary and secondary science teachers towards science.

Table 4

t- value for the Likert Scale scores for the attitude of pre-service elementary and secondary science teachers towards science

	N	M	б	$б_d$	D	t value
Pre-service elementary science teachers	33	55.5	15.68	2.117	22.27	$10.51^{\#}$
Pre-service secondary science teachers	95	77.77	8.08			

Thus, from Table 4, it can be inferred that there is a significant difference in favor of pre-service secondary science teachers in comparison to pre-service elementary science teachers with respect to their attitude towards science. The plausible reason for this finding may be the greater academic exposure to science as a discipline of pre-service secondary science teachers than pre-service elementary science teachers.

Table 5 shows the attitude of pre-service elementary and secondary science teachers towards science.

Table 5

The attitude of the pre-service elementary and secondary science teachers towards science

	N	Positive	Neutral	Negative
Pre-service elementary science teachers	33	00	33 (100%)	00
Pre-service secondary science teachers	95	31 (32.63%)	64 (67.36%)	00

From table 5, it is evident that all the pre-service elementary science teachers had a neutral attitude towards science subjects, while approximately one third (32.63%) of pre-service secondary science teachers had a positive attitude towards science. The plausible reason for this finding may be the wide exposure of pre-service secondary science teachers through laboratory activities, projects, etc. in comparison to pre-service elementary science teachers.

Conclusion

Pre-service elementary science teachers may explore science subjects beyond the formal circular requirements. This may give them a deeper understanding of the subject because, while teaching the subject, the citation of examples and content-rich explanation of the matter enhance the effectiveness of the teaching. Pre-service secondary science teachers should focus more on the pedagogical aspects of the discipline. It may enrich them to present the content from multiple perspectives. The science teacher educators should check the correctness, clarity, and quality of the content on the part of the pre-service elementary and secondary science teachers because if there is any misconcept among the pre-service science teachers, then it cycles among the future generations. In the curriculum, the curriculum planners may incorporate some exercises and assignments that check the content knowledge of the pre-service science teachers. This can refresh the knowledge of the aspirants who are appearing to enroll in a pre-service teacher education course after a gap of a few years.

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Pedagogical Reforms in Teacher Education: Road Ahead for Implementation

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Abstract

Teacher education is very crucial to the whole educational process. Making an educational plan or policy without including teacher education will be incomplete. That is why the National Education Policy (NEP) 2020 gives due importance to teacher education. Teacher education is mostly a combination of different programs, strategies, innovations, and pedagogy. With time, the aims of education continuously change, and for the attainment of these aims, the adaptation of new pedagogy is necessary. Pedagogical reform in teacher education is an innovation in the classroom transaction technique or the adaptation of new techniques for delivering content in the classroom. This is an essential component of any educational system. This paper deals with teacher education and the concept of pedagogical reform. This paper also deals with some pedagogical reform in teacher education that has been done in the past. This paper also discusses strategies for implementing pedagogical reforms in teacher education. This paper gives a vision to the teacher and administrator for implementing some innovative pedagogy in the field of teacher education.

Keywords: *Teacher Education, Pedagogical Reform, Innovative Pedagogy, Implementation of NEP-2020*

Any nation is built by its citizens, and its growth is dependent on the growth and quality of its citizens. Citizen quality, or productivity, depends on the nation's education system. When we talk about education, first of all, two things come to mind: curriculum and teachers. A good curriculum provides the opportunity and scope for the exploration of situations and helps in creating a good product because a curriculum gives a way of thinking and vision to see the situation or world, but on the other hand, a curriculum is handicapped without a good teacher. A good teacher acts as a facilitator in the exploration of curriculum and provides a way of thinking about curriculum. The teacher gives students a vision of how to think about the phenomena. According to the National Policy on Education (1986), “No person can rise above the level of their teacher” because a teacher promotes thinking in a student and guides how to see or think about a particular event as a phenomenon; therefore, teacher education is also a very crucial element for the development of the nation because the preparation of the teacher depends upon the teacher education.

Teacher Education

Teacher education is the process through which teacher preparation takes place. According to the Goods dictionary, 'The teacher education is all acts and experiences that help the person attain a qualification in the education profession and perform the amenability in a more effective, fruitful, and productive way. These acts and experiences may be formal or informal (Rani, 2017). Teacher education also encompasses all policies and provisions that are helpful in making a person competent in the education or teaching profession. Every course has a basic curriculum that helps make people proficient according to their goals. The curriculum of an educational system acts as the backbone of that nation. It comprises curricular activity, co-curricular activity, and learning experiences. For the nation's development, curriculum reforms are necessary because, in a globalized world, problems keep changing. For the reform of any curriculum, three things are very important.

First, needs are felt through external and internal factors. Second is the desire for betterment from the current one, and third is the value and practices of people in changing scenarios (Li, 2019). With the reform in the curriculum, the aim of the curriculum also changes. To achieve the changed aim of any curriculum, the most important thing is reform in practice and transactional modalities, also known as pedagogy. Pedagogy is the practice that is done with the intention of reaching a particular desired educational goal or objective. With changing aims, reform in pedagogy is also important; otherwise, a conflict will occur between the aims and practices for achieving these aims.

Pedagogical Reform

Reform means going beyond the existing one. It is the key element in the progress of a nation (Varshney & Joshi, 2014). This reform is the most complex phenomenon in the education system because it promotes improvement in practices, thoughts, and values. It helps in improving the existing situation where it applies. It is affected by social, historical, economic, and political aspects of society; therefore, these contexts are very important to take into consideration when any policy is implemented. Societal context comprises all conditions and circumstances that exist there. Societal aspects are affected by the traditions, beliefs, and practices of the person living in that particular society. Economic aspects are concerned with access to economic resources, and political aspects encompass political interference in the education system, policies, and other government ideologies. These aspects are also very important while designing, implementing, evaluating, and analyzing the reform. All these aspects determine how an educational system not only organizes, plans, and executes its policies but also helps in the attainment of the aims and goals of the education system. The development of society and positive manifestations in society are the consequences of the reform. This reform depends on the view and way of looking at the situation and the world. Reform promotes the transformation of society when it is implemented and raises the quality of societal production. When this reform is implemented in an educational scenario, existing conditions change, and the productivity of the education system improves. When we talk about pedagogical reform, it means going beyond the existing pedagogical practices—in other words, innovation in the pedagogy or adaptation of new pedagogies to teach content. This facilitates the attainment of the aims and goals of the education system. Previously, the lecture method was the most practiced method in teacher education (Sivakumar & Chitra, 2017), but reform in pedagogy is most important for the attainment of new educational goals. Considering these things, i.e., the University Education Commission (1953), Education Commission (1964–1966), National Policy on Education (1986), and National Education Policy (NEP) 2020, and organizing bodies such as NCERT and NCTE continuously recommended the pedagogical reforms and shifted the pedagogical practices from a teacher-centered to a learner-centered approach.

The Shift

From	To
Teacher-centric curriculum, Stable Design.	Learner-centric curriculum, flexible processes
Teacher directions and decisions	Learner autonomy
Teacher guidance and monitoring	Facilitation of learning
Learning in group	Cooperative learning
Learner receptivity	Learner participation in learning
Knowledge as "given" fixed.	Knowledge evolves.
Linear exposure	Multiple exposures
Common learning tasks	Individualized learning routes
Disciplinary focus	Multidisciplinary, educational focus

Source- NCERT (Teacher Education for Curriculum Renewal)

NEP-2020 recommended the adaptation of problem-solving-based learning, a constructivist approach in teaching-learning, experiential learning, and online learning, as well as technology-dominated pedagogy in teacher education, which shifts the learning towards a more learner-centered approach. NEP-2020 emphasizes those pedagogical practices that promote learners and learner-friendly environments in the classroom.

Some Pedagogical Reform in Teacher Education

Personalized Teacher Education (1991): This activity-based program was designed by Devi Ahilya Vishwavidyalaya in 1991. After that, Lucknow University also designed this program in 1996. This program is mainly designed to shift teacher education from lecture-based to activity-based classrooms. In this program, teaching through lectures is discouraged. This program is designed based on individual differences in the classroom and gives every learner the scope to learn at their own pace and way. This program also promotes group interaction, social collaboration, and discussion and gives more scope for the use of a variety of presentation modes and assessment techniques (Goel & Goel, 2010).

Problem Solving in Higher Education through the Participatory Approach (1992) : This program was also designed by Devi Ahilya Vishwavidyalaya in 1992 (Goel & Goel, 2010). This program mainly emphasized problem-based activity. In this program, a problem is presented for the learner to solve. In this way, the cognitive development of the learner takes place in a more effective way.

Holistic Teacher Education : This is designed by the Center of Advanced Study in Education, Baroda. This program helps in the development of a student in research-based education. This program mainly focuses on learning and teaching through the seminar Research and Publications as well as the development of creative writing ability among students through a participatory approach. This program is also designed by CASE Baroda and mainly emphasizes the collaboration and participation of peer groups in the integration of technology in education for the betterment of the curriculum. The technology integrated with conventional teaching methods for this purpose, smart board wave learning, is introduced in the education system.

Television Broadcasting: Firstly, the UGC started the television program in 1984 with the collaboration of the Indian National Satellite Project; after that, the IGNOU started the program on Door Darshan in 1991 (Vyas, Sharma, & Kumar, 2020).

Blended Learning (BL): BL is described as a combination of classroom and online instruction that preserves face-to-face interaction (Marie, 2021). In this approach, online learning is integrated with traditional classroom teaching. Through this approach, learning becomes more flexible, and students' engagement increases. In this approach, the teacher's role shifted from the information provider to the facilitator of students. Students learn by actively participating in activities and are motivated to self-learn in the classroom. This promotes critical thinking and reflective thinking in teachers and educators. This is a beneficial method of teaching in teacher education.

Constructivist Learning: In this approach, the students construct their knowledge based on their prior knowledge or experience. This is based on the subjective notion of knowledge construction. In this approach, students work and explore the situation, accept or reject the proposed hypothesis, and construct knowledge. This approach is used in teacher education for the development of reflective thinking and critical thinking. This approach expands the knowledge of teachers and educators. This is a very effective approach for teacher education and professional development (Rout & Behera, 2014).

This approach has many models for the transaction of content, but at the root of all models, the construction of knowledge exists. From time to time, many models of the constructivist approach come to light. The 4Es model of the constructivist approach contains four steps for the construction of knowledge, i.e., (1). Explore (2). Explain (3). Expand (4). Evaluate, and Roger Bybee gave the 5Es model of constructivism, i.e., (1). Engage (2). Explore (3). Explain (4). Elaborate (5). Evaluate, but now recent work by the educationists has revealed that knowledge construction is done in the 7 steps, i.e., (1). Illicit, (2). Engage, (3). Explore, (4). Explain, (5). Elaborate, (6). Evaluate and (7) expand.

Brainstorming: This method was used by Alex F. Osborn in 1953 (Besant, 2016). This method of teaching was introduced in teacher education for the development of divergent thinking. In this method, first of all, a problem is presented before the students, and they are asked to think of different solutions for the presented problem. In this way, the method promotes divergent thinking, problem-solving, and critical thinking in teachers.

Peer Tutoring: In this method, one less proficient student is taught by a more proficient peer. In this method, the teacher makes a group of diverse students with consideration for knowledge and competency. In groups, more proficient students teach the topic to less proficient students. This approach was introduced in teacher education to develop critical thinking, appreciate a group work tendency, and promote social interaction.

Cooperative Learning: This is a group learning technique. In this technique, a group of 4 to 6 students completes a task. Each student learns how to contribute to the team, demonstrate individual responsibility, and also take accountability for group performance. According to Slavin (2014), cooperative learning is a method of instruction in which small groups of students work together and help one another learn academic content. In other words, cooperation means helping others (Moseley, 2022).

Collaborative Learning: This is also a group learning technique, but in this technique, a small group of members work on a common goal and objective. In this technique, the whole group is responsible for the group's performance or task (Moseley, 2022).

Team-Teaching: In this technique, two or more teachers teach the same class simultaneously. Each teacher assists one another. This type of teaching helps attain equity in the classroom, achieve the diverse needs of the students in the classroom, and promote the classroom one step ahead in an inclusive setup.

Seminars and Conferences are also used as transaction modalities in the modern era, ensuring a critical and healthy discourse among the learners.

Debate: With this approach, the students have a topic to discuss (something as uncontroversial as possible to begin with), and two groups of students debate one side of the issue and the other. To prevent the discussion from degenerating into an acrimonious conflict, it is ensured that there are some rigorous rules. These types of activities can be used in teacher education classrooms to promote a higher level of thinking for students (Chitra, 2019), a lofty and worthy goal for any teacher.

Reflective Teaching: Reflection on one's work is a key component of being a professional and essential to teacher education. In order to understand how their beliefs affect classroom behavior, teachers must analyze their biases, assumptions, and beliefs about teaching and learning (Siddalingaswamy, 2001). This method helps the teacher improve practices and behavior in the classroom. This method gives the prospective teacher scope to think about himself or herself.

Individualized Instruction: This type of instruction moves away from the traditional lecture teaching model and offers students a way to learn at their own pace (Wiley University Services, 2023). In this type of instruction, slow learners take time to develop a concrete understanding of the concept, and those students who learn the concept quickly can move forward to the next concept. This method allows slow learners and gifted students to learn at their own pace. This method considers individual differences in the learner and provides more scope for learning.

Brain-targeted Teaching: This is the mixing of teaching methods with the neurological findings of the brain. Brain-targeted teaching should be based on brain-targeted learning. The brain has its own structure and capacity to learn concepts and information. Every brain has a unique face, and it can change with experience. The brain has great flexibility and capacity to process information as well as connect with prior knowledge. (Tokuhoma-Espinosa, 2010). In brain-targeted teaching, role-play methods, brainstorming, problem-solving, project-based learning, and mind-mapping strategies are incorporated with the neurological theory of learning in a definite pattern. Brain-targeted learning contains seven steps: pre-exposure, preparation, initiation and acquisition, elaboration, incubation and memory encoding, verification and confidence check, and celebration and integration. Brain-targeted teaching promotes problem-solving, creative thinking, critical thinking, and conceptual understanding in the learner (Janu, 2023).

Implementation Strategies For Pedagogical Reform in Teacher Education

- The recruitment process should be a combination of written tests, interviews, and demonstrations of teaching to assess one's pedagogical skills.
- The teacher recruitment tests for recruiting teachers need to be more comprehensive in order to assess the cognitive, affective, and skill domains of learning.
- In recruitment tests, more emphasis should be given to application ability, which ensures the pedagogical understanding of students.
- It is mandatory that each teacher-educator participate in at least 50 hours of continuous professional development (CPD) opportunities every year for their own professional development. This CPD will cover a workshop related to the new pedagogical practices that are emerging in the field of teacher education.
- Strengthen the infrastructure that supports new pedagogical practices.
- For Ph.D. students, mandate classroom teaching in real situations, which will expose them to the pedagogical practices in their chosen discipline.
- Give educators the opportunity to develop technology-based proficiency.
- Organize workshops for the training of innovative pedagogical practices for in-service teacher educators at the college and university level.

Conclusion

Society is diverse, and the needs of society also have great variation. To address this diversity, academicians and policymakers reform the curriculum and aims and objectives of education. For the attainment of these objectives, pedagogical innovation takes place. For the development of society, innovation is the key element. Teachers play a crucial role in implementing any new programs in the education system (Rani, 2017); therefore, there is an essential need to strengthen teacher education. While many reforms in teacher education have been introduced, they are ineffective without a change in pedagogical practices. For the attainment of changes in the education system, a need to change pedagogy and train the teacher in that pedagogy is important. The above-mentioned pedagogical practices provide scope for the better development of teachers and strategies to help the

administrator and teacher in the implementation of pedagogical reform in the field of teacher education.

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Leading Students Towards Sustainable Happiness: Exemplary Learning Exercises

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Abstract

If we ask someone, "Would you like to be happy?" Unanimously, everyone agrees that happiness is vital. It makes no difference to the person's religion, caste, class, nation, gender, or age group. Everyone's true desire is to be happy. Whether they are aware of it or not, people exert a lot of effort to accomplish this by using their bodies, thoughts, and resources, but when we ask the second question, "Are you always happy?" everyone begins to reflect. Now, not everyone reacts the same way they did before. Why doesn't everyone's wish for happiness in life come true? So, we'll talk about how to make the desire to be happy all the time come true in this article.

Keywords : *Sustainable Happiness, School Student, Learning, Well-being*

Today's students experience a high level of sensory enjoyment in all of its guises and forms. Their primary goal in life seems to have changed to this. As a result, there is a desire for higher earnings, which education tries to meet by emphasizing high levels of skill development. The vital components of harmony, good human connection, emotions, knowledge, and awareness, however, are usually ignored in today's education. As a result, the emphasis that is being placed now is partial (just material), ignoring the elements that have to do with relationships and education. As a result, the happiness that results is frequently fragmentary and fleeting. Even someone with outstanding academic credentials who possesses a high level of talent and competence could experience internal turmoil and a lack of understanding of what constitutes sustainable happiness.

It can be noticed in the continually increasing data on mental health issues, which is as follows: According to the most recent National Mental Health Survey (N.M.H.S., 2016), every sixth individual in the nation needs mental health assistance in India (Ranjan, 2018). A report by the National Crime Records Bureau (N.C.R.B.) indicates that in India, at least one student committed suicide per hour in 2019 (Business Standard, 2017).

According to the World Health Organization, depression affects one in every four Indian children between the ages of 13 and 15. India has the highest rate of suicide out of the 10 Southeast Asian countries (WHO, 2017). Poonam Khetrapal Singh, WHO's South-East Asia Regional Director, said that depression may result in suicide, which is the second leading cause of death in the area for persons between the ages of 15 and 29 (Business Standard, 2017). Seven percent of teenagers reported feeling upset as a result of comments made by classmates, family members, or teachers; 25% of teenagers were "depressed" and "sad or gloomy," while 11% were "distracted" and found it difficult to keep focused on their schoolwork most of the time or continuously; 8% of teenagers had "anxiety" or had trouble sleeping due to worry; and a comparable number felt lonely sometimes or constantly (Mental disorder, 2022). On the discussion of Pariksha Pe Charcha 2.0, Prime Minister Narendra Modi, who views depression as a major problem, said, "Youth depression in a nation such as India is quite troubling" (Hindustan Times, 2020).

The results of the NIMHANS's mental health study, according to the president, Ram Nath Kovind, were worrying because 10% of Indians had one or more mental health issues. He said that there were more Indians with mental health issues than there were people in Japan as a whole. According to a worldwide report of mental health issues (WHO), anxiety and depressive disorders were the most prevalent mental illnesses, affecting 1 in 8 people, or approx. 970 million people worldwide, in 2019 and so on (India is facing a possible mental health epidemic, warns President Kovind, 2017). It forces us to rethink the purpose of education rather than merely improving the academic performance of the students. As in the publication of Happy Schools!, a framework for learner well-being in the Asia-Pacific, (UNESCO, 2016) has also emphasized its concern about re-considering the aim of education and raised a question: how happy are children in the school system? This question requires us to consider the critical linkage between happiness and our current education system. The educational system must implement a curriculum that focuses on the development of cognition, linguistic, literary, and mathematical abilities, in addition to the happiness and well-being of the students.

Thus, this article aims to direct students' focus toward investigating, feeling, and expressing happiness in ways that go beyond fleeting pleasure to something more genuine and long-lasting with the help of understanding the moral of the story of a lost child and activity. The student will be able to understand happiness in terms of oneself, relationships, and society as a whole. A paradigm shift will occur when a student switches from seeking happiness outside through their senses to being able to secure it within themselves.

Happiness

"Happiness is not something ready-made; it comes from your own actions." (Dalai Lama)

Buddha, the most important philosopher in history and the first to teach about happiness, is considered the originator of happiness in the East. All living beings, according to Buddha, pursue happiness. While researching happiness, he continues to teach that morality and happiness are closely intertwined, i.e., morally good actions lead to happiness. To be a decent person, we must be free of the three poisons of greed, hate, and illusion. Buddha says that when we feel mental health (arogya), mental purity (anavajjata), and mental capacity (cheka), all of which lead to happiness (sukhavipaka), However, according to Buddha, the ultimate purpose is not happiness, but the highest level of happiness, i.e., Nirvana, is the highest degree of bliss, implying that there are many levels of happiness underneath it. The process starts with sensual pleasure (kamasukha), the pleasure we get from fulfilling our five senses through the five bodily sense organs. Then there is the greater degree of non-sensuous bliss, Nirvana (Karunadasa, 2013). The Bhagvad Gita, a Hindu scripture, has also explained how to live a happy life and achieve the highest level of happiness. There are three kinds of happiness in the Bhagad Gita: Satvik, Rajasik, and Tamasik (Sri Krishna says about happiness in the Bhagad Gita, 2018).

- Satvik, or pure happiness, is the happiness that arises from the growth of the soul. However, unpleased in origin, full of suffering and sacrifices, but live nectar in the end. Such happiness arises from the peace of the spiritual intellect of the embodied soul and renouncing the impurities of rajasic (the nature of passion) and tamasic (the nature of ignorance).
- Rajasik, or result-oriented happiness: Rajasik mostly comes from the contact of the senses, i.e., arises spontaneously due to the interaction of the fire censes: eyes, ears, nose, tongue, and body, which initially resemble nectar but eventually causes pain for the present life and next life.

- Tamasic or slothful happiness is based on fantasy happiness. It is based on imagination and ignorance. The gita itself mentions its laziness, oversleeping, and misunderstanding. It is designated as the mode of ignorance.

According to Gita, for achieving happiness, the first thing is to meet the basic needs, i.e., food, shelter, clothing, health, and education. In the Bhagvad Gita, Lord Krishna says that one whose mind is not fastened to outward objects enjoys the bliss of the inner soul; self-realization is the utmost truth through the science of connecting individual consciousness with the Supreme consciousness, and this is the way through which one gains infinite bliss.

''सुखंत्विदानींत्रिविधंश्रृणुमेभरतर्षभ।
अभ्यासाद्रमतेयत्रदुःखान्तंचनिगच्छति।।18.36।।''

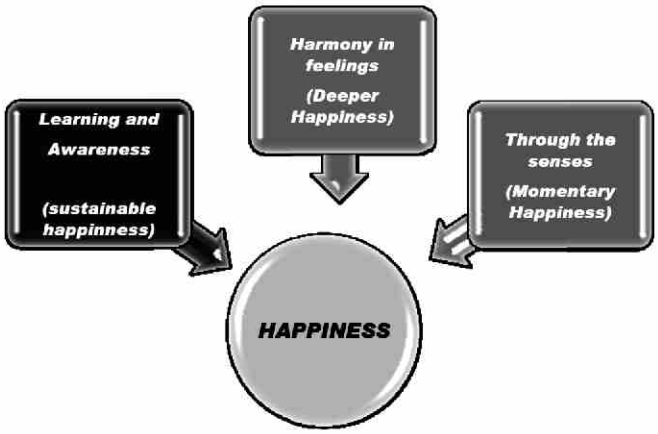
As in the Bhagavad Gita, the Lord says, "Dear Arjuna! And now, hear from me about the threefold happiness that a person can achieve to bring an end to their suffering through practice." Arjun asks, "How can one realize their own Atma, get rid of their agony and suffering, and find happiness?" The Lord says, "Practice, and you shall enter that state." Talking and reading books alone won't get you very far. Only by churning the curd can butter be produced. The only way to obtain sweet juice is through crushing sugar cane. The only way to obtain oil is through crushing the seeds. Man can therefore transcend sorrow and find happiness through practice alone (Bhagavad Gita, 2017).

According to Osho, happiness has nothing to do with riches, power, achievement, or position or reputation. He stated in his book that happiness has nothing to do with success, nothing to do with desire, and nothing to do with money, power, or status. Happiness is related to one's consciousness. Happiness is a state of awareness (Osho, 2009). In other words, our own actions can make us happy or miserable. True happiness comes from inside, when there is no darkness, no ego, no tensions, and no anxiety, i.e., when one is completely satisfied. When there is no concern for the past or the future, just the now is relevant. True happiness can only be found in the moment. According to Osho, "Now is the only time, and here is the only place." Then, all of a sudden, the entire sky falls on you. This is genuine happiness. This is true bliss (Osho, 2009).

As Sri Ramana says (as cited in James, 2012), "The mind of a knowledgeable person [someone who has attained true self-knowledge] does not depart from brahman [the fundamental and absolute reality, which is our own true being or self]. However, the mind of an ignorant [lacking in true self-knowledge] continues to experience pain by wandering the world and finds satisfaction by briefly returning to Brahman. All that we perceive as the world is actually only a collection of ideas or mental images that we have created in our minds using our capacity for imagination. This is why the world is merely a thought. Happiness is experienced by [our] mind when the world vanishes or when cognition ceases; sadness is experienced when the world appears."

In his model for happiness, Nagraj (1999) as cited in the Happiness Curriculum Framework, (2019) addressed the four facets of human existence—material, behavioral, intellectual, and experiential—in an integrated way. Our senses, emotions, learning (understanding), and awareness are matched by these. These three together make up the "happiness triad." In other words, humans seek fulfillment in all of these facets of life, and as a result, they experience happiness, peace, satisfaction, and other positive emotions that collectively make up what is known as "human happiness."

The Triad for Happiness (Happiness Curriculum Framework, 2019)



- **Momentary Happiness :** This is the pleasure we get via inputs through the 5 senses of sight, sound, touch, smell, and taste. We can experience happiness through our senses, like eating good food, watching a film, or listening to music, which are highly enjoyable but shorter in duration. Happiness from tasting a sweet or watching a good film could last from a few seconds to a couple of hours. Hence, this can be classified as momentary happiness.
- **Deeper Happiness:** We have an innate desire for feelings such as affection, care, gratitude, and respect in all of our relationships, whether with friends, family, or society. These feelings establish the worth of a relationship and are thus referred to as "values." We anticipate that these feelings will be realized. These expectations can only be met by feelings, not by material or physical things. We are satisfied when these expectations are met. Furthermore, happiness derived from internal emotional attachment, trust, respect, and gratitude for someone lasts longer than happiness derived from the senses. This is called deeper happiness. Their influence on our inner state lasts longer and allows us to 'be' in a relationship.
- **Sustainable Happiness:** This refers to being aware of our thoughts, mindful of our actions, and free of internal conflict. This happiness is what we feel when we solve a problem, learn something new, grasp a concept, or grasp some meaning that sticks with us for a much longer period of time. As a result, this is sustainable happiness, which includes clarity of thought, a deeper understanding of oneself, the ability to focus, mindfulness, finding cause, purpose, and interconnectedness in one's life, and so on. The kind of sustainable happiness that results from such understanding is a remedy for emotional, behavioral, and social problems.

Thus, happiness is a state of inner harmony that occurs when one's mind becomes an observer of one's thoughts and feelings, tries to find satisfaction with oneself, and maintains healthy relationships with others as well.

Here, the researcher, through the gist of the story of the lost child (as cited in NCERT English, IX), attempts to guide students toward sustainably happy lives.

The story presents a psychological assessment of a young child. His parents take him to a fair. He makes several childish requests there. But he is repeatedly turned down. Unexpectedly, he is separated from his parents. He now has no desire for anything other than his parents. It was a spring festival at the time. The child and his parents walked to the fair together. He was lured to a variety of appealing things along his walk. A toy shop caught his eye. He wanted a toy desperately. But his father gave him a red-eyed look. After that, he kept talking to the parents. They reached the event.

They came across a candy vendor. The small youngster begged for burfi, but no one responded. He then carried on walking.

A flower salesman was selling a gulmohur garland. In a hushed voice, he murmured, "I want that garland." He wasn't able to get what he wanted. He kept going. A man was selling various colored balloons. The infant desired all of them. His entreaties were not addressed. He therefore kept moving forward.

A snake charmer was playing a flute in front of a snake. The child walked up to him before turning around and moving on. There was a roundabout going full speed. The child said, "I want to go to the roundabout." Nobody, however, replied. His parents made the next move. As a result, they lost contact with the kid. All of his prior wishes have now been fully satisfied.

My mother and my father were the only ones who remained. A man hauled him up. The man tried to comfort the small child, but in vain. He fulfilled all of his earlier requests for him. He made an effort to reassure him and distract him, but he failed. He didn't stop crying for his parents. The question of why the lost youngster stops worrying about the things he used to want emerges in this situation.

Thus, it is concluded that, as students, we constantly want things because we feel happy when we acquire them, and because we feel happy when we acquire them, we crave more of them just like the lost child. In this sense, our desires are perpetually expanding and multiplying. It's like adding fuel to the fire of our desire rather than putting out the flames. There are many ways that wishes might appear in us, such as likes or dislikes, drives or prejudices, hopes or concerns, but regardless of how they appear, they disturb our natural mental peace and conceal the enjoyment that is always present (as in the story of the lost child and his parents). The only cause of any pain or grief we experience is our own desire. As a result, in order to truly experience happiness, we must be capable- that is, free ourselves of all cravings (Nishkam Karm).

Here, researchers assist students in understanding how to achieve a state of sustainable happiness through the activities of intention and competence.

Activity: (Intention and Competence)

Objective: By comprehending the difference between intention and competence, students should be able to improve their competency in accordance with their intentions.

Section A - Intention (wish): what we genuinely intend to be

Section B - Competence (potential): where we stand at the moment

If one is trapped in a downpour, it is quite difficult to stay dry. In a similar vein, it can be challenging to avoid being impacted by the issues and harsh realities of the outside world. In order to live the kind of life one wishes to live, one must learn how to overcome challenges in life. This is the key to finding inner peace, happiness, and fulfillment.

We all desire to be happy for the rest of our lives. In the same way, we also desire to make

others happy. However, as we lack the required skills, we are unable to do so. For instance, a person who wants to drive well but is not proficient behind the wheel. To achieve this, he would need to be knowledgeable about traffic regulations, have a basic understanding of automobile operation, and have driving experience. Understanding and regular practice will provide the person with the capacity to drive, and they will be able to do so safely. As a result, having good intentions alone won't make things happen; one also needs to become skilled at it.

The difference between wish and potential:

Wish (Intention)	Potential (Competence)
1. Do I want to be truly happy?	1. Do I genuinely feel happiness?
2. Do I desire the happiness of others?	2. Am I able to keep the other person happy at all times?
3. I will feel happiness after this achieving goal?	3. Can I sustain this happiness?

Conclusion

All of the pain or grief we experience is purely a function of our desires. We must therefore free ourselves from all cravings in order to achieve everlasting happiness. But how will we go about doing this? We are the ones who fuel, cause, and originate our desires; thus, fighting them won't help us get rid of them. The thing that fights against our desires is our mind, which is also the source of all of our desires. Our minds are naturally predisposed to desire. Therefore, becoming "desireless," or free from the results of wishes, is the best approach to controlling our desires.

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Connect, Collaborate and Co-Teach in Digital World

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Abstract

The ever-increasing convergence of digital technologies has brought us to an information society with no boundaries, which could be significantly marked by knowledge explosions and easily accessible information. The Internet has become a prominent technology and laid the foundation for the latest information infrastructure in the world. The digital revolution has generated a change across the world; it has transformed the way we live, the processes of interaction and communication, sharing, learning, work culture, and leisure; in essence, it has changed everything, either directly or indirectly. It has brought new challenges and opportunities for the education system too, and this changed scenario of teaching and learning has necessitated the intentional incorporation of 21st century skills in the teachers and their pedagogy, i.e., effective communication, collaboration, creativity, decision-making, critical thinking, digital skills, etc. All these skills play an important role in co-teaching as well. Co-teaching is an effective and efficient student support instructional strategy where two teachers work together and learners benefit from their experience at the same time. These digital tools and technologies offer the co-teachers the ability to click, connect, collaborate, and co-teach. Web 2.0 tools provide an opportunity to create, share, and collaborate with others. Technology being helpful to co-teachers may augment their strength and capabilities. It helps co-teachers create a lively learning environment and provide enriched and engaging learning experiences to learners. This thematic paper overviews the key aspects of co-teaching and attempts to view the significance of digital technologies and tools in the area of co-teaching. It also suggests some tools and apps that could be used by co-teachers to make their co-teaching more engaging and effective.

Keywords : *Co-Teaching, Collaboration, Communication, Digital World, Digital Tools*

The 21st century is marked by a paradigm shift in education that has resulted in endeavoring for the development of the highest educational, technological, and digital skills in order to refine the entire world into a global community. This advancement of technology has brought us to an information society with no boundaries, which could be significantly marked by knowledge explosions and easily accessible information. The inclusion of digital technology has brought about a revolution in every aspect of society; education has also not remained untouched by this ongoing revolution. It has brought new challenges and opportunities for the education system too. With the change in the education system, the role of teachers has not only changed but keeps on changing. From an instructor who pours knowledge into the minds of learners, teachers have become constructors, facilitators, and creators of learning environments who guide and assist the learners in the construction of their own knowledge. This changed scenario of teaching and learning has necessitated the intentional incorporation of 21st century skills in the teachers and their pedagogy, i.e., effective communication, collaboration, creativity, decision-making, critical thinking, digital skills, etc. All these skills play an important role in co-teaching as well. Co-teaching is an effective and efficient student support instructional strategy where two teachers work together and learners benefit from their experience at the same time.

Co- Teaching: The Power of Two

Effective teaching is essential to facilitate the learning of students, attain educational objectives, and improve outcomes. According to Scruggs et al. (2007), if implemented with fidelity, one of the most effective techniques for improving student achievement is co-teaching. Co-teaching reduces the burden on teachers as the student-teacher ratio cuts to half, which benefits not only them

but also learners. Learners get more individual attention and assistance from both teachers. Co-teachers work in a collaborative manner and follow all the phases of teaching, from planning to organizing, followed by implementation and assessment of learning, together and with the consent of each other within one classroom. They complement each other's specific abilities, skills, expertise, and strengths and offer a shared professional support system, which results in the increased acquisition of knowledge by learners, and their diverse abilities are also taken care of.

The roots of co-teaching could be traced back to the 1960s, when progressive education tended to be situation-specific rather than homogenous across schools. In the 1980s, it started gaining popularity among general education teachers so that learners could be provided with a more individualized and diversified learning experience (Friend et al., 1993). Although it could be used in any class with any type of learner, co-teaching is predominantly used in inclusive classrooms in relation to serving the educational needs of differently-abled learners. In an inclusive setting, a regular education teacher and a special education teacher are paired in a collaborative environment to co-teach general students along with students with special needs. The definition of co-teaching as given by Wendy Murawski in her book on Co-Teaching in Elementary Schools (2010) sounds apt, which reads:

"***When two or more educators co-plan, co-instruct, and co-assess a group of students with diverse needs in the same general education classroom..."***

This definition outlines three essential aspects of co-teaching, i.e., co-plan, co-instruct, and co-assess, which are quite essential for successful teaching. Constant planning for teaching the learners according to the formulated instructional objectives, determining the most effective instructional methods to provide engaging learning experiences to the learners, and assessing their learning outcomes are the three major steps of the teaching process.

Co-teaching with Technology: The Augmented Power of two

Technology being helpful to co-teachers may augment their strength and capabilities. It helps co-teachers create a lively learning environment and provide enriched and engaging learning experiences to learners. Scruggs et al. (2007) emphasized that the use of the various available digital tools and resources can make the co-teaching model even more meaningful and effective than the traditional one-lead, one-support model. Technology provides an opportunity for co-teachers to engage in effective planning by connecting, communicating, and collaborating without the constraints of time and space, instead saving their time. They may co-create or adapt contextual and meaningful learning experiences for learners with the use of technology and may connect with learners even outside the boundaries of the classroom. Students could also use digital tools and resources to communicate and work with others in a collaborative manner, thus *learning with and learning from* others, which may inculcate a "*we*" feeling in them. The use of technology in the co-teaching model may assist in the transformation and augment the power of co-teaching.

Facilitating Communication

Whether it's co-planning, sharing views on the implementation of planning and co-instructing, or deciding the mode of co-assessment, effective communication is required every time in between co-teachers. Communication is the only way to connect with and interact with the co-teacher and give instruction to learners. Advancements in technology and the emergence of Web 2.0 tools have offered high functionality in terms of easy and quick communication. These digital tools are free to communicate and transfer information and have instant access to an enormous amount of information, which was almost impossible to find earlier. Technological advances have provided a number of ways and means to communicate, such as mobile phones, email, videos, social media, and more. The line between digital and in-person communication is fading. Digital communication tools, along with traditional communication skills of reading, speaking, and writing comprehensibly and

clearly, could also be used effectively in the co-teaching process. Some of the commonly used media through which teachers may communicate with students are e-mails, podcasts, voice phone calls, audio, video, and text conferencing, blogs, wikis, online discussion forums, Facebook pages, Twitter, WhatsApp, YouTube, recorded video clips, lecture capture, shared whiteboards, e-portfolios, blackboard collaboration, etc. While using digital communication, teachers may adopt synchronous or asynchronous technologies. Synchronous technologies require all the participants to join the communication at the same time, but not necessarily at the same place. Whereas in asynchronous technologies, the participants have the choice to select both the time and place to access information or communicate, learners have the opportunity to access these technologies whenever required as per their need and at the time and place of their own choice.

Collaborate and Co-Create Resources

Collaboration is the essence of the co-teaching model. In this digital age, the nature of collaboration has transformed from face-to-face with colleagues across a conference table to web-mediated interactions in the virtual world. For academic collaboration, co-teachers may use online communication, the sharing of links, working collaboratively on Google Docs to share knowledge, and using online platforms for publishing work. There are many web-based collaborative writing tools aimed specifically at academic writers to help. Google Drive, Google Classroom, Etherpad, Mediawiki, VideoAnt, Eido, Diigo, virtual whiteboards, Padlet, etc. are some of the secure, real-time collaborative tools that allow teachers to co-create documents and presentations. These online platforms also allow co-teachers to make comments, suggest edits, and chat with each other during the co-creation of resources.

Cartoons and comics are always students' best friends; a set of free and user-friendly tools to create their own comic strips or cartoon animations could prove to be effective in enhancing the creative power of students and letting them delve into the creative world without any hindrance. Cartoons for the Classroom is an example of such a website. Mind mapping tools, i.e., Spider Scribe, Wise Mapping, Chart Tool, etc., could be used to illustrate a topic or a concept. Managebac, Rubicon Atlas, or chalk.com are online curriculum mapping tools that could prove to be highly supportive for co-teachers to work collaboratively. With the use of these digital tools, teachers' co-teachers may work together to plan units of work that align with standards. It also enables them to have access to shared unit plans at all times, which will be significant when co-teachers co-plan together.

Sharing Resources and Tracking Performance

For effective co-teaching arrangements, it is imperative to share resources with others. These resources may include educational resources, a timetable, notes, worksheets, students' data, their assessment and evaluation sheets, progress records, etc. Storage digital tools and platforms such as Google Drive, OneDrive, Dropbox, etc. allow co-teachers to not only readily share their resources but also provide storage options collaboratively in an organized manner. It saves time and energy for teachers because its use will keep teachers from running off for a master copy from a co-teacher. Similarly, web applications like CCPensieve, Confer, and Evernote could be used to keep track of student interactions, conferences, organize data, and monitor student growth. Some of these apps also allow you to take pictures of student work samples and share them easily with collaborators. These applications help keep records digitally safe, secure, and easy to handle. The co-teaching model enables co-teachers to assess students more frequently, and these digital tools and apps could make their work easier and more hassle-free.

Scheduling

For scheduling the co-teaching sessions, meetings, etc., calendar apps available on devices could be used. It allows teachers to set an alarm as a reminder for important work to be done; a small note could also be added to help students remember. Google Calendar enables co-teachers to share

their schedules and view others' schedules, as well as send invitations to events.

Miscellaneous

There are numerous other apps that could be used by co-teachers in various ways to extend their co-teaching with the use of technology and to co-create meaningful and enriched learning experiences for every learner in the class. These apps include Padlet, which allows teachers to collaboratively post notices, images, felicitations, messages, and ideas to encourage learners' participation and collaboration. It is more like a digital bulletin board. Socrative and Kahoot are the apps that provide creative ways for formative assessments and keep learners engaged and motivated. Gimkit and Class Dojo are the apps that encourage learners to take charge of their learning. These apps add a flavor of gamification to learning to motivate learners, and they enable co-teachers to co-create and organize engaging learning environments. Visuwords is a great app for language students. It is an online visual dictionary full of graphics that gives learners the opportunity to visualize the definitions and relationships between words in their vocabulary.

Conclusion

To address the diverse educational and behavioral needs of learners, a co-teaching model is a necessity in any inclusive classroom. It is a collaborative and shared model of teaching where two teachers co-teach the same topic to the same students while at the same time using pre- and co-planned instructional strategies in one classroom. Thus, co-teaching necessarily includes co-planning, co-instructing, and co-assessment, for which the pre-requisites are effective and honest communication, respect, and trust between co-teachers. Using digital tools and technologies in co-teaching models strengthens the abilities and skills of teachers and augments them in providing enriched, meaningful learning experiences to learners. These digital tools and technologies offer the co-teachers the ability to click, connect, collaborate, and co-teach. Web 2.0 tools provide an opportunity to create, share, and collaborate with others. Teachers may use these tools and techniques to be creative in their teaching methods and pedagogy to motivate the learners and maintain their interest, keeping them engaged in various learning activities. These tools also provide a great way to create deeper connections, understanding, trust, and strong bonding in the relationships of co-teachers.

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Effect of Co-operative Learning Methods in Social Studies Classes : A Review of Literature

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Abstract

Cooperative learning as an alternative of the lecture-based teaching method concentrates on learning in groups. It de-emphasizes memorization, minimizes competitiveness, and encourages students to learn together and work together for a common goal. It provides teachers an opportunity to understand the heterogeneity of the class and transform into a facilitator of learning. Over the past several years, a number of research studies had investigated the outcomes of cooperative learning methods in the classrooms. The purpose of the present paper is to overview the research studies done on the effectiveness of the cooperative learning method. In the present paper 26 research studies, done in social studies classrooms, have been reviewed. The findings of the studies reveal that cooperative learning exerted an overwhelmingly positive effect on personal and social variables while effects on academic variables are mixed.

Keywords : *Cooperative Learning, Social Studies, Social Science. Effect, Student*

In recent years, cooperative learning as an alternative method of lecture-based teaching has been a buzzing word in the arena of teaching and learning. It is considered as most possible solution to overcome the limitations of individualistic and competitive learning. It de-emphasizes memorization, minimizes competitiveness, and encourages students to learn together and work together for a common goal. It provides teachers an opportunity to understand the heterogeneity of the class and transform into a facilitator of learning.

In the class of co-operative learning method numerous sets of techniques are used which encourage students to work together in small groups and help one another to achieve learning objectives (Johnson & Johnson, 2009). Those techniques involve the structuring of an active classroom environment wherein students work in groups to discover, to solve and to learn, and at its basic, it provides a framework for dialogue and conversation among the students. (Huddy, 2012). The philosophy of co-operative learning is rooted in the development of the theory of social interdependence (Deutsch, 1949), which states that individuals, working in groups, can in most cases provide for greater productivity and ideas than individuals working alone.

According to Johnson & Johnson (1998) as cited in (Tran, 2013) “placing people in the same room, seating them together, telling them that they are a co-operative group, and advising them to 'cooperate', does not make them a co-operative group”. There are five basic elements in cooperative learning which make cooperative learning group different from other groups. Those elements are–

- Positive interdependence- It is perceived as the first element of cooperative learning. It occurs when the actions of individuals promote the achievement of joint goals (Johnson & Johnson 2009). Positive interdependence stands for those situations wherein cooperative learning group students work together, share their material, discuss the problem, and support each other and the success of an individual depends upon the success of the group.
- Face-to-Face promotive interaction- It occurs as individuals encourage and facilitate each other's efforts to accomplish the group's goals. In cooperative learning groups, students are required to interact verbally with one another on learning tasks (Johnson & Johnson, 2008).
- Individual accountability- It denotes that students ask for assistance, do their best work,

present their ideas, learn as much as possible, take their tasks seriously, help the group operate well, and take care of one another (Johnson, 2009). It is a requirement that all group members must contribute to the achievement of the shared goal.

- Interpersonal and social skill- In a group students accept and support each other; get to know and trust on each other; resolve conflicts constructively. (Johnson & Johnson, 2006).
- Group processing- It exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to describe what actions of a member are helpful and unhelpful, make decisions about what behaviors to be kept continue or to change. (Jonson & Johnson, 2009)

The basic elements of co-operative learning suggest, unlike individual learning, students in co-operative learning, work in a small group to help one another in learning academic material. Success of group is depends upon the success of each member. Students work through the assignment until all group members successfully understand and complete it (Johnson et al, 1998).

In the class of co-operative learning the teacher's role changes from knowledge transmitter to knowledge facilitator. Instead of delivering lectures and promoting rote learning, a teacher in a formal co-operative learning group performs innovatively. He specifies the objectives for the lesson; makes a number of pre instructional decisions as size of group, explains the tasks and the positive interdependence, observers the learning pattern and he guides if needed. The most distinguished aspect of co-operative learning method is that it facilitates students-students interaction rather than teacher-students interaction only.

When compared to other forms of teaching method, co-operative learning is appreciated for many other benefits. It is said to provide a better foundation for achievement, better psychological health (Johnson, Johnson, & Holubec, 1984; Slavin, 1991; Stahl & VanSickle, 1992), increased motivation to learn (Sharan & Shaulov, 1990), improved inter-ethnic relationships (Sharan, 1980; Slavin et al., 1985), and positive peer relationships (Johnson &Johnson, 2009) greater long-term retention of information and more creative thinking (Sharan, 1980). Cooperative learning has also been found to increase attendance, time on task, enjoyment of school and classes, motivation, and independence.

Importance of Present Review

Like Science and language, social studies are also part of elementary education. The aim of social studies is to inculcate knowledge and values among individual to make them active and responsible member of society. NCERT defines aim of social science teaching as to develop active, responsible, and reflective members of society (NCERT). Co-operative learning is based on constructivist approach and facilitates a direct interaction among students. It develops academic as well as social skills among them. In the past, a number of empirical studies have been conducted to examine the effects of co-operative learning in social studies classrooms. Findings of those studies suggest that co-operative learning exert mixed effects on various variables. The present review may help educators and researchers in obtaining deeper insights about the use of cooperative learning in social studies classroom.

Numerous reviews on the effects of cooperative learning have been conducted till date (Kulik and Kulik (1982), Qin, Johnson, and Johnson (1995), (Slavin 1995), Howard (1996), Springer, Stanne, and Donovan (1999), Bowen (2000), Johnson, Johnson, and Stanne (2000), Scott, Tolson, Schroeder, Lee, Huang, Hu, and Bentz, (2005), Romero, (2009); Iegal, and M.T. (2010), Huddy,

(2012), Hilk, (2013). Among them, most of the reviews focused on studies done to check the effect of cooperative learning in specific subject area such as science and language (Kulik and Kulik (1982), Qin, Johnson, and Johnson (1995), Howard (1996), Springer, Stanne, and Donovan (1999), Bowen (2000), Scott, Tolson, Schroeder, Lee, Huang, Hu, and Bentz, (2005), Romero, (2009); Iegal, Huddy, (2012), Hilk, (2013). It is found that most of the reviews done are quantitative in nature. Mata analysis has been used there to see the effect of cooperative learning mostly on academic achievement. Only a single review was found which focused on the use of cooperative learning in social studies classroom (Slavin, et al 1995). However that review was comprehensive in nature and having valuable implications for the teachers of social studies. After 1995, numbers of changes have been done in the field of social studies and cooperative learning however the review of the studies done to check the effect of co-operative learning during abovementioned period has not been done. Observing the need of the time, the researcher decided to review the studies done to check the effect of cooperative learning in social studies class room. The present can be helpful for social science educators, instructors and researchers' in understanding the use of cooperative learning method.

Methodology of Review

For the present review the researcher used various electronic database to search the studies done to check the effect of co-operative learning in social studies class room. Especially ERIC (Educational Research Information Centre), International Dissertation Abstract and Proquest were used frequently to get the studies. For Indian studies Shodh Ganga and Shodh Gangotri were referred. Only articles published in journals, dissertation and thesis were referred for the present review and other materials like conference proceedings, chapters of any book or books were not included. Following were the key-words for searching the studies –Cooperative learning, Social studies, Effect of cooperative learning, Cooperative learning and Social studies, Social studies class room. However researcher found number of studies on these key-words and many were not relevant. Therefore, only those studies were chose, which were having the combination of three keywords, i.e. cooperative learning, social studies and effect. In the social studies History, Geography and Economics were included. Total 40 articles were found relevant on the above-mentioned parameter. Then, the researchers manually screened out article's titles and abstracts and confirmed that the selected articles: 1) must be using cooperative learning method, 2) should be related to social studies, and 3) must provide empirical evidence. Finally, 26 studies were identified as the sample pool. The studies reviewed were listed in the table given in the last part of the paper.

Overview of the Studies

Total 26 studies were reviewed out of which three were using both quantitative and qualitative methods. For collecting the quantitative data the survey method was employed in those studies and for that purpose objective questionnaires and scales were used. Interviews and observation were used to gather the qualitative aspect of the data. Those studies were of Netherhood, (1986); Armstrong, (1997) and Nurhniyah, (2015).

19 studies were purely quantitative and all were employing pre test post test quasi experimental design. Those studies were of Lang (1983) Luckher, Rosanfield, Sikes & Aronson (1976), Nattive (1986), Sumitra (1994), Chawla (2005), Behera & Patnaik (2010), SalaKo, Eze and Adu (2013), Ross (2002), Tahir, (2010), Tran (2014), Lee, Ng and Phang (1999), Blaney, Stephan, Rosenfield, Aronson, & Sikes (1977), Bridgeman (1981), Little (1986), Johnson & Johnson (1981), Johnson, Johnson, Tiffany & Zaidman (1983), Lampe & Rooze (1994). Only in 7 out of 19 experimental studies the cooperative learning strategies as TGT, STAD, Learning together and Jigsaw were described specifically (Bridgeman (1981); Lang (1983); Little (1986); Nattive (1986), Sumitra

(1994); Lampe & Rooze(1994) ; Armstrong, (1997) Sharma & Sharma (2009)

Out of 26 studies reviewed, 3 studies were purely qualitative in nature. The survey method was used for data collection in those studies. For that purpose interviews and observation were used (Early, (1999); Ryan and Wheeler (1977) and Aydin, (2013). Only a single study reported as case study and found out the experience of students of cooperative learning classroom, by using interview and focus group discussion for the data collection. (shoran 2015).

All the 26 studies reviewed in the paper contained similar purpose statements and tended to focus on examining the effect of cooperative learning in social studies classrooms. Students ranging from elementary school to university were the participants in majority of the studies. Only two studies included teachers as a participants Ross (2002). All the studies were done in educational institutions, ranging from elementary classes to colleges Of those studies, only two were done in universities (Bonk, 2001; Wilson, 1998) and eight were done in public institutions (Dooley & Murphrey, 2000; Jones & Moller; 2002; Parisot, 1997; Schifter, 2000) only one was done in private school. However only in few studies it was mentioned clearly whether that institute was public are private. Most the studies were silent on that criterion.

Findings

First Author	Research purpose	Research method	Grade	Variables	Results
Luckher et al (1976)	Comparison of student with interdependence and without interdependence	Quasi experimental	5th and 6th	Academic achievement	Interdependence influence positively on academic achievement
Ryan and Wheeler(1977)	Compare the student if CL classroom And traditional classroom	Survey	5th& 6th grade	Cooperative behaviour	more cooperative behaviour, such as institution and implementing group strategies and rendering assistance to one another.
Armstrong (1997)	Effect of STAD, CL technique on Achievement and Attitude towards sst	mixed	12th grade	Achievement & attitude	No effect of CL on both variable and survey suggest it is enjoyable
Early (1999)	Effect of cooperative learning on the group work and social skills interaction	Survey	9th to 11th	Social skills	CL increased group effectiveness and interpersonal interaction
Lang (1983)	Use of a (TGT),CL technique on achievement and attitude towards economics	Quasi experimental	College students	achievement and attitude	No significant effect of CL on both variable
Nattive (1986)	Compare the effects of three different CL techniques on Achievement with Traditional method	Quasi experimental	6th	Achievement	Students in CL classroom perform better than Students in traditional classroom

Netherhood (1986)	effects of cooperative learning technique on achievement and attitude outcomes	mixed	7th	Academic achievement and Attitude	Students in cooperative learning classroom has increased number of friends, higher academic expectations and increased self-confidence. No significant differences for academic achievement.
Sumitra (1994)	effect of cooperative learning on student achievement, self-concept and liking of classmates	Quasi experimental	10th	Achievement, Self concept & liking	Positive effect of CL on all variable
Karch (2001)	Effect of group training in	Mixed method	High school	Attitude And Achievement	Students in trained group has more
	Cooperative learning class				positive attitude but no difference in achievement
Chawla (2005)	Effect of CL on creativity and achievement	Quasi experimental	5th	Creativity &Achievement	Positive effect of CL on all variable
Sharma & Sharma(2009)	effectiveness of STAD, CL method over conventional method on learning outcomes, interpersonal relationships and self-esteem	Quasi experimental	7th	Achievement, interpersonal relationships and self-esteem	Positive impact on all variable
Behera & P (2010)	Comparison of students in CL class & traditional class	Quasi experimental	Secondary Students	Academic achievement	Positive influence of CL on Academic Achievement
Salako et al (2013)	Effect of cooperative learning on Knowledge and attitude	Quasi experimental	Junior secondary	Knowledge and attitude	Positive effect of CL o n both variable
Ross (2002)	Effect of CL method on students achievement, Students perception and teacher perception	Quasi experimental		Achievement, perception	Positive impact and better perception
Tahir (2010)	Effect of CL method on students	Quasi experimental	12th grade	Achievement, Self-esteem, Social self efficacy, Motivation	Positive effect of CL on all variables
Tran (2014)	Effect of CL on Achievement and knowledge Retention	Quasi experimental	College students	Achievement and Knowledge retention	Positive effect on both variable

Lee et al (1999)	Effect of CL on Achievement, Attitude and Classroom Climate	Quasi experimental	Elementary students	Achievement, Attitude, Classroom Climate	Positive effect of Cl on achievement and attitude while no difference in classroom climate
Aydin (2013)	Opinion and self evaluation of students towards CL	Survey	College	opinion	Increased interest, participation and highly motivated
Sharon (2011)	Experience of students in Cooperative classroom.	Case study	12th grader	--	Positive social and Motivational outcomes
Nurhniyah (2015)	implementation of cooperative learning model to boost students' motivation to learn social studies	Mixed	5th grader	Opinion	Increased positive motivation. Expectation for sucess
Blaney, Rosenfield, & Sikes(1977)	Effect of CL on Students self esteem and attitude towards classmate	Quasi Experimental	5th grader	Self esteem and Attitude	Higher self esteem and Positive attitude towards classmate in CL classroom than Traditional
Bridgeman (1981)	Effect of CL on students role taking ability	Quasi Experimental	Grade: 5th	Role taking ability	Positive effect
Little (1986)	Effect of CL on Students self concept and achievement	Quasi Experimental	Grade: 3rd	social studiesachievement ntself-concept	Positive effect on both variable
Johnson &Johnson (1981)		Quasi Experimental	4th grader	Cross ethnic interaction cross-ethnic helping inter ethnic interaction during free time	cooperative learning promoted more cross-ethnic interaction in both instructional and free-time activities
Johnson et al (1983)			4th grader	achievementcross-ethnicinteractioncross-ethnicinterpersonalattraction	CL promoted higher achievement for minority students, more cross-ethnic interaction and greater cross-ethnic interpersonal attraction
Lampe & Rooze(1994)			4th grader	achievementself-esteem	higher achievement favouring CL, higher self-esteem

Cooperative Learning and Academic Variables

Out of 26 studies, the purpose of the 19 studies was to check the effect of cooperative learning on academic achievement. The Researchers had assessed the academic achievement of students on objective as well as subjective measures. However in both cases, the empirical findings were mixed. Among the reviewed studies, in 17 studies academic achievements of cooperative learning group's students and traditional teaching group's students had been compared with the help of objective

measure i.e. questionnaire related to content taught in class during the experiment.

It was found in 14 studies that the cooperative learning improved academic performance [Luckher, Rosenfield, Sikes and Aronson (1976)]; Johnson, Johnson,Tiffany, & Zaidman (1983); Little (1986); Nattive (1986); Lampe & Rooze (1994); Cristine, L (1999); Sumitra (1994); Karch (2001); Ross (2002); Chawla (2005); Sharma & Sharma (2009); Behera & Patnyak (2010); Tahir, (2010); Tran (2014). However in 3 studies no significant difference was found (Armstrong, (1979); Lang (1983); Netherhood (1986). In those studies pre test post test experimentation was used. Researcher found only a single study where survey method was used wherein students experience about cooperative learning was asked.

Reviewer did not find a single study which reported that traditional/individualistic methods was superior to cooperative learning method in social studies classrooms. Co-operative learning exerted positive effect in the majority of studies as well as affectless in a few. However given the fact that numerous research methodologies were used across the studies, it became more difficult to identify a universal factor which was making that difference.

In the opinion of reviewer, 14 studies, in which the achievement was improved, were longitudinal in nature. Students got frequent exposure of cooperative learning method in those studies. Those studies were ranged from eight week of cooperative learning method session, to regular class of cooperative learning intervention for a complete semester and over the course. The studies where academic achievement was not improved, students got limited exposure of cooperative learning environment there, ranging from a session of one week to 15 days. In some studies, effect of one cooperative learning strategy as STADs or TGT had been checked and it was possible that the student's lack of familiarity with the cooperative learning approach might hamper the academic growth. Since dynamics of group-oriented learning in the classroom are contingent on many other factors such as instructional method, task, students and content of subject etc, the effect of cooperative learning might vary as per the impact of those factors. Therefore more specific and controlled researches are needed to understand when and how cooperative learning could be used to enhance academic achievement.

Co-operative Learning and Personal Variables

In co-operative learning environment the self concept and self esteem of students enhanced. Out of 26, in 6 studies the effect of cooperative learning was checked on students self concepts and self esteem and the results were positive in all [Blaney, Stephan, Rosenfield, Aronson, & Sikes (1977), Sumitra (1994), Lampe & Rooze (1994), Sumitra (1994), Little (1986), Sharma & Sharma (2009), Tahir, (2010)]. A study reported that in cooperative learning classroom student's fear of getting failed in examination decreased. It is probably because in cooperative setting students learn together and participate individually in knowledge development process. They feel there self importance while interacting in a small group. These factors affect the psychology of student and their feelings.

Cooperative Learning and Affective Variables

Effect of cooperative learning on various affective variables also found out in the studies. out of 26 studies, 7 assessed student's attitude towards social studies classroom and towards their classmates [Blaney, Stephan, Rosenfield, Aronson, & Sikes(1977), Lang (1983), Netherhood (1986), Armstrong (1997), Cristine, L (1999), Karch (2001), Salako, Eze, & Adu, (2013)]. Among these studies, 4 indicated that student's attitude towards social studies classroom and their classmates increased. In the remaining 2 studies no significant changes in student's attitude were reported (Lang

(1983), Armstrong (1997). Due to lack of information about tools used to gather the data, the cause of positive effect and no effect could not be find out. Student's opinion and their experiences in cooperative learning settings were also assessed in studies. Focus group discussion and interview were used for those assessments. The results showed that students in cooperative learning settings gained interest and got highly motivated to learn (Aydin, 2013). A study reported that students who learned via cooperative learning method felt more optimistic toward their feature and got highly motivated.(Nurhniyah, 2015). However, when teacher's perception was assessed by interviewing them, they reported differently.

Most of the teachers reported cooperative learning better than individualistic method. However A teacher supported lecture method at elementary level and suggested cooperative learning for higher grade students. In her opinion unless students would not adapted with cooperative learning classes, they would not feel good and their performance would not increase. Commonly, students are taught through traditional method in most of the classes and if they would teach through co-operative learning method in single class only, probably it would not be as effective as if they would teach in all classes thorough co-operative learning method. She argues that effect of cooperative learning depends on teacher's experiences and mastery on the method.

Cooperative Learning and Social Variables

Cooperative learning affects student's social, communication and behavioural skills positively. Among the reviewed studies, 10 studies worked on students social and behavioural variables in social studies classroom using cooperative learning intervention. Ryan and Wheeler (1977) conducted a survey to compare the student's cooperative behaviour in cooperative learning and traditional teaching classrooms. Results of the study reveals that students in cooperative learning environment are more cooperative, give respect to each others, behave politely, render assistance to each other and implement group strategies. Earley (1999) investigated the effect of cooperative learning on the group work and social skills interaction of 64 social studies student from grade 9 to 11during a twelve-week period. The self report group function survey was used to assess the significance of instruction of social skills in the cooperative learning setting. Results of the survey indicated that social skills taught through cooperative learning methodology enhanced group effectiveness as well as interpersonal interaction.

Sumitra (1994) reported that students in cooperative learning develop more liking for their classmates than the students who learn through traditional method of teaching. Johnson and others (1976) found that pupils in cooperative small group learning setting responded more pro-socially on altruistic versus individualistic choice tasks than the pupils in individual learning situations. Conwell et. al. (1988) and Salako & Adu (2013) also reported similar results.

Johnson & Johnson (1981) and Johnson, et al (1983) noted that students cross ethnic interaction and cross interpersonal interaction increased after cooperative learning intervention. Ross noted that when teachers' reflections were asked towards students' communication behaviour and behavioural problem during cooperative learning session, they reported positively. The potential reason behind the overwhelming positive effect cooperative learning on social and communication skill of students are assumed as the theory of co-operative learning is rooted in theory of social interdependence.

Conclusion

The effects of cooperative learning on cognitive variables are mixed. Studies reporting on issues such as student's attitude towards cooperative learning classroom, motivation, interest and

student perceptions provided useful insights into the application of cooperative learning strategy in the classroom. Researchers showed positive effect of cooperative environment on personal and social skills of students. The positive result encourages the idea that the cooperative learning approach enhances group oriented learning in classroom settings. However the key question that what are the conditions under which cooperative learning exerts positive effect remains unanswered.

The review confirms the idea that cooperative learning improves student content knowledge, followed by discussion, inquiry ability and motivation. It suggests that inquiry ability and discussion should be considered as an important learning objective in cooperative learning based social studies classroom. In some cases the cooperative learning strategies in social studies learning are not very effective learning tools.

Implications and Suggestions

The findings of the study are providing significant insights of the benefits of cooperative learning. Primarily, social studies is aimed to develop social skill among the students and those skills are considered as key elements of cooperative learning, Hence the cooperative learning method can be advocated as a keynote method of learning for social studies. The policy makers, school administrators and teachers should give cooperative learning method in due space in curriculum and the class rooms.

In the review of 26 studies researcher did not find adequate information about the teachers' training in co-operative learning. Only two studies have given information about the teachers experience and their perceptions about student's behaviour in co-operative learning setting. Since teacher is consider as an axis of teaching and learning process and a medium to implement any method so more research is needed to explore their role and contribution. What will be the effect if students would teach through trained teachers, experienced teacher and trainee teachers should be checked? Hendrix has identified 5 methods for social studies teaching. More research can be done to develop new cooperative learning methods for social studies teaching.

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Problems faced by Students during Online Open Book Examination: A Quantitative Study in Higher Education Institutions

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Abstract

Education plays a crucial role in the development of individuals as well as the development of a country. But due to COVID-19, the education system as well as the evaluation system have changed. Online open book examination is a method of evaluation in which the question paper is made available on the students' portal, and students can upload their answers on the portal. The present study is a descriptive survey conducted in Varanasi on a sample of 200 higher education students. It aimed to identify the problems faced by higher education students in the online open book examination (OOBE). The researcher made an e-questionnaire, which was used as a tool to record the responses of UG and PG students. The findings indicated that students faced more problems regarding internet access, uploading of answer scripts, timelines, and writing answers as per limitations, whereas students faced fewer problems regarding proper guidance for appearing in examinations, question papers, and technological knowledge. Results also indicated that there is a significant difference between the problems faced by UG and PG students of higher education during OOBE, whereas there is no significant difference between the problems faced by female students and male students of higher education.

Keywords: *Online Open Book Examination, Higher Education Students, and Problems*

To keep up with the changes brought about by the progress of science and technology as well as the effects of the COVID-19 pandemic, India's educational system is undergoing significant and consistent modifications (Eltahir, 2022). The higher education industry has been affected by the COVID-19 pandemic. The traditional closed book test is well-known in Indian academic institutions; however, the epidemic has compelled the institutions to turn to new ways of student evaluation (Ashri & Sahoo, 2021; Dhawan, 2020; Eltahir, Alsalhi, & Al-Qatawneh, 2022).

COVID-19 has had an impact on education, particularly on students, colleges, and universities. According to an estimate by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the COVID-19 pandemic at the post-secondary level of education is affecting over 34 million students. Due to this circumstance, educational institutions must reform their curricula, reimagine how they teach and learn, and overhaul how they evaluate their students' performance. Colleges all across the world have embraced e-learning and online testing, and Indian colleges have done the same. These methods have received accolades for their adaptability, affordability, and other benefits. E-learning is now more important than ever in these difficult times. In a similar vein, online testing is the solution to this dilemma. In order to create a developed society, education is essential. The education industry should therefore be resilient. However, this epidemic has raised concerns about how equipped the school sector is to handle a crisis-like situation. "It is vital that governments and civil society work together to mobilize resources and expertise to address the impact of COVID-19 on education. Creating long-term plans to address the demands of education in emergencies should be a part of this process. Global Coordinator for GCE, Grant Kasowanjete.

A combination of an online exam and an open book exam is called an online open book examination (OOBE). An online exam is one that is given using the internet. Additionally, it assesses

pupils' knowledge levels. Students can take online tests whenever they want from their own devices. A web browser and an internet connection are needed for the online test. Exams that allow for book and notebook consultation are known as "open book" exams. They may also respond to queries using other acceptable sources of information. These, in particular, aim to foster skill development and innovative thinking. Additionally, it is a standard procedure in legal exams. Therefore, OOBE is a method of evaluation in which students are given access to the question paper on their portal and are allowed to upload their answers on the portal and respective e-mails within a set amount of time. Students are also permitted to use books, notes, and other study aids while taking the exam.

Review of Related Literature

In the current environment and beyond, online open-book exams have the potential to become the new norm (Sarkar, Mishra, & Nayak, 2020). Because they believe they need to develop their creativity and critical thinking skills in order to succeed in higher education, students prefer open-book exams to measure their learning. They feel more confident and less anxious during open book exams (Khalid, S. et. al., 2020). The potential advantages of online open-book exams must be understood. For instance, according to certain studies, this type of assessment boosts students' efficacy and self-confidence (Myyry L., Joutsenvirta, Brown, 2020). This not only undermines the exam's intended aim of evaluating pupils' proficiency but also puts those who are competing against one another under additional stress. In addition to closed book exams, open book exams should be included in assessments because they improve students' critical thinking abilities (Gujral, S. et. al.).

Research Question

What are the problems faced by students in higher education institutions regarding or during the online open book examination?

Objectives

1. To study the problems faced by students in higher education institutions during the online open book examination.
2. To study the problems faced by students in higher education institutions during the online open book examination on the basis of the following variables:
    - Gender (Male/ Female)
    - Class/Level (PG/UG)

Research Method

A descriptive survey method was adopted for the present study.

Sample

200 students were selected through Purposive Sampling technique from two private colleges and two faculties (Science and Education) of Banaras Hindu University as government institutions. Researchers selected these colleges because they conducted an online open book examination.

Tool

A self-made e-questionnaire was developed by the researcher. Its validity was checked by the experts. It had five alternatives, such as strongly agree, agree, neutral, disagree, and strongly disagree. The e-questionnaire consisted of 22 items related to the dimensions of problems, such as proper guidance for appearing in examinations, internet access, question paper, uploading answer scripts, technological knowledge, timeline, and writing answers. The researcher shared the e-

questionnaire link through mail and in the WhatsApp group.

Data Analysis

Data was analysed by finding out Percentage and t-Test.

Result and Discussion

Objective: 1 To study the problems faced by students in higher education institutions during the online open book examinations**.**

Table 1: Item wise analysis of the problems faced by higher education students during OOBE (responses are given in percentage)

No.	Statements	StronglyAgree	Agree	Neutral	Disagree	Strongly Disagree
1	You were given complete information related to appearing inOOBE.	18.50	56.50	12.00	11.50	1.5
2	The entire syllabus has been taught through online mode before OOBE.	13.50	50.00	11.00	19.50	6.00
3	You get the solution of the problems faced during the examination by the control office / institution immediately.	12.00	22.00	24.00	35.00	7.00
4	You do not face any network problem in uploading the answer scripts.	2.00	25.00	16.00	46.50	10.50
5	After login to your portal in the examination, the university site starts working slowly.	2.50	42.00	19.00	32.50	4.00
6	You upload the answer scripts on the portal within the exam period	19.50	48.00	16.00	14.50	2.00
7	You find it difficult to make PDF of answer sheets.	3.00	25.50	13.00	49.50	9.00
8	You find mailing the answer scripts more convenient than uploading.	14.00	44.50	11.50	27.50	2.50

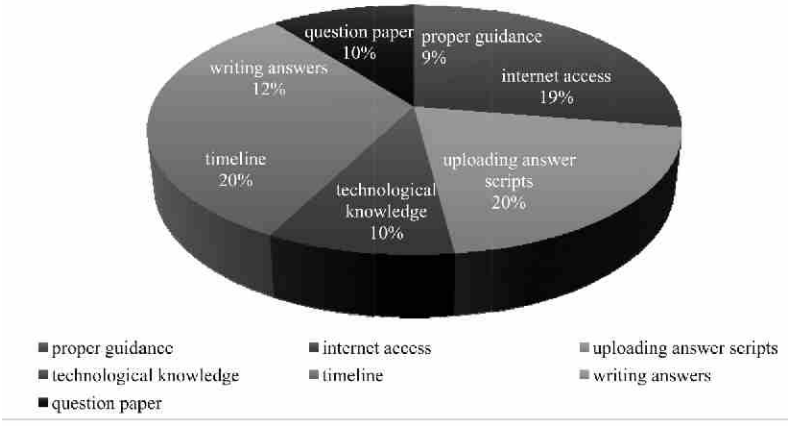
9	You did not receive the confirmation mail after mailing the answer sheets.	11.00	42.00	21.50	20.50	5.00
10	Are you worried about not getting the confirmation mail?	18.00	58.00	12.50	9.50	2.00
11	For using OOBE requires good knowledge of ICT.	5.50	50.50	21.50	18.50	4.00
12	OOBE takes more time than traditional exam.	13.50	58.00	12.00	14.50	2.00
13	You also upload blurred scans of answer sheets due to paucity of time.	10.00	34.00	19.00	32.00	5.00
14	OOBE is more stressful and hard working than traditional exam.	10.00	36.00	21.00	30.00	3.00
15	You follow the instructions for writing the answers to the questions in the OOBE.	27.50	52.50	8.00	8.50	3.50
16	There is difficulty in answering the questions of the OOBE according to the instructions (i.e., page number, word limit, etc.).	4.00	39.00	16.00	36.00	5.00
17	You are not serious about these exams because you have access to books, vocabulary, notes (books, handout and printed material, dictionary) etc.	8.00	37.00	16.50	28.00	10.50
18	You use your thinking and problem-solving skills to write answers to questions	1.00	10.50	19.00	60.00	9.00
19	OOBE is not helpful in developing the required knowledge and skills in you.	7.50	44.50	19.50	21.00	7.50
20	The instructions given in the question paper are clear and simple.	15.50	59.50	13.00	10.50	1.50

21	Apart from the concerned subject, question papers of other subjects are also uploaded on the portal.	6.50	25.00	17.00	35.70	16.00
22	OOBE consists of only long answer type questions and the number of questions is less as compared to the traditional test.	5.00	36.50	21.00	31.50	6.00

Table 2: Dimension wise analysis of the problems faced by higher education students during OOBE

NO.	Dimensions	Percentage of Students
1	Problems regarding proper guidance for appearing in Examination	9
2	Problems regarding Internet Access	19
3	Problems regarding uploading Answer Scripts	20
4	Problems regarding Technological knowledge	10
5	Problems regarding Timeline	20
6	Problems regarding writing answers	12
7	Problems regarding Question Paper	10
8	**Total**	100

Pie chart 1: Dimensions of the problems faced by higher education students during OOBE



From the above pie chart, it is clear that higher education students faced more problems with internet access, uploading answer scripts, timelines, and writing answers as compared to proper guidance for appearing in examinations, question papers, and technological knowledge during online open book examinations.

Problems regarding proper guidance for appearing in Examination

56.50% of students agreed, and 18.50% of students strongly agreed that they were given information regarding appearing in OOBE. 50% of students agreed and 13.50% strongly agreed, respectively, with the statement that the entire syllabus has been taught in online mode. 12% of students strongly agreed, 22% agreed, 24% were neutral, 35% disagreed, and 7% strongly disagreed with the statement that they get the solution to the problems faced during the examination from the control office or institution immediately. It is clear that they were not facing problems in appearing for the exam because the entire syllabus was taught to them and they were already told how to appear for the exam, but they were neutral about getting any solution to the problem from any authority during the exam.

Problems regarding Internet Access

46% of students disagreed, and 10.50% of students strongly disagreed that they did not face any problems uploading the answer scripts. 42% of students agreed and 32.50% disagreed with the statement that after logging into their portal for the examination, the university site starts working slowly. Most of the students responded that internet access was not very good when students were logging in and uploading their answer scripts to the portal. The reason could be that this examination system was new for every institution.

Problems regarding uploading Answer Scripts

48% of students agreed, and 19.50% of students strongly agreed that they were uploading the answer scripts on the portal within the timeline. 49% of students disagreed, and 9% strongly disagreed, that they find difficulty making PDFs of answer scripts. 44.50% of students agreed, and 14% strongly agreed, with the statement that they find mailing the answer scripts more convenient than uploading them. 42% of students agreed, and 11% strongly agreed they did not receive the confirmation mail after mailing the answer sheets. 58% of students agreed, and 18% of students were worried about not getting the confirmation mail. Through the data analysis of the given responses, it is clear that most of the students upload their answer sheets within the exam period. They find it more convenient to mail than to upload the answer because they do not find it difficult to create a PDF, but they are worried about not getting the confirmation mail after mailing the answer scripts. It could be due to slow internet access.

Problems regarding Technological knowledge

50.50% of students agreed and 5.50% strongly agreed, whereas 21.50% of students were found neutral on the statement that using OOBE requires good knowledge of ICT. Knowledge of ICT is essential because one must know how to upload, how to know if a document has been uploaded, how to mail when the internet is slow, and who to speak to in case of problems. Hence, lack of ICT knowledge is also a problem in this type of examination.

Problems regarding timeline

34% of students agreed and 10% strongly agreed, whereas 19% found it neutral that they were uploading blurred scans of answer sheets due to paucity of time. 36% of students agreed and 10% strongly agreed, whereas 21% of students found it neutral that they perceived OOBE as more

stressful and hard-working than traditional exams. 58% of students agreed, and 13.50% of students strongly agreed with the statement that OOBE takes more time than a traditional exam. In the traditional exam, the time limit is 3 hours, and the number of questions is also greater than OOBE, but there is no condition to upload them. Compared to that, the time taken in the OOBE is more (4 hours) within which we have to upload the answers, so this exam seems to be a more laborious task than the traditional exam.

Problems regarding Writing Answers

Most of the students followed the instructions in writing the answers to the questions in OOBE. 52.50% of students agreed, and 27.50% strongly agreed with writing answers according to instruction. On average, 43% of students agreed, whereas 41% disagreed that they find difficulty answering the questions of the OOBE according to the instructions (i.e., page number, word limit, etc.). 37% of students agreed, and 8% strongly agreed that they were not serious about these exams. 60% of students disagreed and 9% strongly disagreed that they were using their thinking and problem-solving skills to write answers to questions. 44.50% of students agreed that OOBE is not helpful in developing the required knowledge and skills in them. Many students follow the instructions to write the answers, but they face problems like page limits and word limits. Students have books, handouts, printed material, dictionaries, etc. to write the answers to, so they are not serious about these exams. Due to this, problem-solving skills are not built into them. That is, not being able to build the necessary knowledge and skills in students is a major problem.

Problems regarding Question Paper

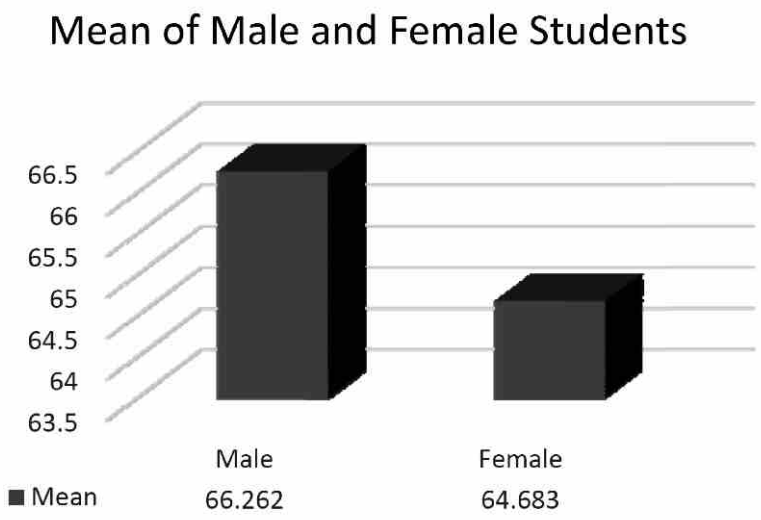
59.50% of students agreed and 15.50% of students strongly agreed that the instructions given in the question paper are clear and simple. 36.50% of students agreed and 5% strongly agreed, respectively, with the statement that OOBE consists of only long-answer type questions and the number of questions is less as compared to the traditional test. 6.50% of students strongly agreed, 25% agreed, 17% were neutral, 35.70% disagreed, and 16% strongly disagreed with the statement that, apart from the concerned subject, question papers from other subjects are also uploaded on the portal. On the basis of the analysis of the data, it is clear that the question paper in OOBE is easy to understand because of its clear instructions. Also, it consists only of essay-type questions, which are fewer in number as compared to closed book examinations. Therefore, students faced fewer problems regarding the question paper.

Objective: 2 To study the problems faced by higher education students during OOBE on the basis of the following variables: gender (male/female) and level/class (PG/UG) (wrongly framed)

Table 3: Problems faced by students in higher education regarding or during OOBE on the basis of their gender (male or female)

No.	Gender	No. of students	Mean score	Degree of freedom	t-calculated value	t-tabulated value	Result
1	Male	100	66.26	194	1.9684	1.98	Not significant
2	Female	100	64.68				

At 0.05 significant level



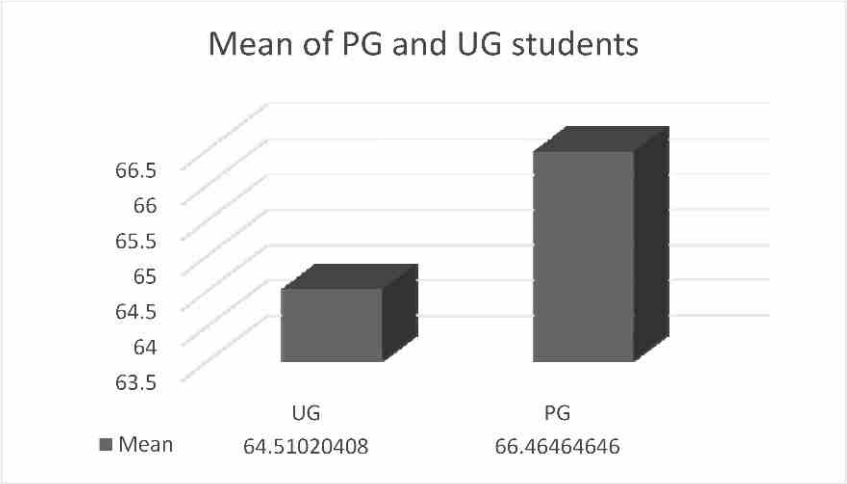
Graph No: 01

From the above table, it is clear that the calculated value of t is 1.96, which is less than the critical value of 1.98 at the 0.05 level of significance. Therefore, it indicates there is no significant difference between the problems faced by female students and male students in higher education institutions regarding or during OOBE. Male and female students were familiar with this method of evaluation because it has become a necessity during COVID-19 for evaluation at all levels of education.

Table 4: Problems faced by higher education students during OOBE on the basis of their Class (UG/PG)

No.	Class	No. of students	Mean score	Degree of freedom	t-calculated value	t-tabulated value	Result
1	PG	100	66.46	194	2.451	1.98	significant
2	UG	100	64.51				

At 0.05 significant level



Graph No: 02

From the above table, it is clear that the calculated value of t is 2.451, which is more than the critical value of 1.98 at the 0.05 level of significance. Therefore, it indicates there is a significant difference between the problems faced by undergraduate (UG) and postgraduate (PG) students of higher education during OOBE. Knowledge of ICT is necessary in this exam, and this difference can be seen due to the maturity level of students and previous experiences such as giving different exams, having more knowledge of ICT, or having a good grasp on the subject matter.

Conclusion

The majority of educational institutions, including universities and schools, have shifted to using technology in the process of assessing students through the introduction of e-exams during the teaching-learning process because of the COVID-19 pandemic. In OOBE, students face more problems regarding internet access, uploading answer scripts, timelines, and writing answers as per limitations, and they face fewer problems regarding proper guidance for appearing in examinations, question papers, and technological knowledge. We must adopt a strategy that prioritizes students and encourages knowledge creation above knowledge acquisition. OOBE is more useful in the present scenario, but the government should take some initiative to organize a hassle-free and obstacle-free examination.

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समावेशन के दृष्टिकोण से बेसिक शिक्षा परिषद की हिन्दी भाषा व सामाजिक विज्ञान की पाठयपुस्तकों का विषयवस्तु विश्लेषण : एक समीक्षा

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Abstract

Textbooks are an important tool for teaching and learning various subjects of the curriculum. In the Indian context, textbooks are central to the classroom dialogue between students and the teacher. If these textbooks fulfil the set broad educational goals through various concepts, facts, poetry, stories and contexts, the prevailing values in the society are also cultivated and embodied unconsciously. Keeps going compared to other subjects in the curriculum, linguistics and social sciences were considered liberal subjects that have a deep and immediate connection with society. While linguistics textbooks are designed for knowledge, enjoyment and acquisition of language skills, social studies textbooks deal with the life around us, the past, the functioning of social institutions and constitutional values. Texts in these subjects should be created to build an equal society. so that educational processes become more inclusive and creative. Textbook content analysis from the perspective of inclusion examines whether it is acceptable to include and present different classes, religions and gender groups in the content of textbooks for these subjects. In view of the above, this study intends to analyse the content of Hindi and social science textbooks administered by the Council for Basic Education.

Keywords : *Textbook, Curriculum, Inclusion, Content Analysis*

शिक्षा एक सामाजिक प्रक्रिया है, अतः समाज की संस्कृति एवं परिघटनाएं प्रमुखता से शैक्षिक व्यवस्था में परिलक्षित होती हैं। समाज में व्याप्त जातिगत, धार्मिक, आर्थिक तथा स्त्री – पुरुष संबंधों का पदानुक्रम और सांस्कृतिक विविधता विद्यालयों में बच्चों की सहभागिता को प्रभावित करते हैं। भारत विविध संस्कृतियों वाला समाज है जो अनेक प्रादेशिक व स्थानीय संस्कृतियों से मिलकर बना हैं। लोगों के धार्मिक विश्वास, जीवन शैली और सामाजिक संबंधों की समझ एक दूसरे से बहुत अलग हैं। सभी समुदायों को सह–अस्तित्व व समान रूप से समृद्ध होने का अधिकार हैं और शिक्षा व्यवस्था को भी हमारे समाज में निहित इस सांस्कृतिक विविधता के अनुरूप होना चाहिए (एन० सी० एफ० 2005)। शिक्षा आयोग (1966–64) की रिपोर्ट के घोषणा के अनुसार यह शिक्षा व्यवस्था की जिम्मेदारी है की वह विभिन्न सामाजिक श्रेणियों और समूहों को पास लाए और एक समतावादी और समाकालित समाज का सृजन हो। लेकिन ऐसा करने की बजाय वर्तमान में शिक्षा खुद सामाजिक अलगाव की ओर अग्रसर है और श्रेणी विभाजन को बढ़ावा दे रही है। पाठ्यपुस्तकें समाजीकरण की प्रक्रिया का एक महत्त्वपूर्ण स्तम्भ हैं। भारतीय विद्यालयों में पाठयपुस्तकों का महत्व इसी बात से समझा जा सकता है कि अधिकांशतः यहां पाठ्यचर्या और पाठयपुस्तकों को समानार्थी के रूप में लिया जाता है। पाठ्यपुस्तकें केवल ज्ञान का वैधानीकरण ही नहीं करती बल्कि उसे बालमन में गहराई से स्थापित भी करती हैं। शिक्षा आयोग (1964–66) ने पाठ्यपुस्तकों को पाठ्यचर्या या पाठ्यक्रम से ज्यादा महत्व देते हुए कहा कि इन राष्ट्रीय मानकों की परिभाषा एवं इनके व्यवहारिक क्रियान्वयन की व्यवस्था को राष्ट्रीय स्तर पर पाठ्यपुस्तकों का निर्माण करके सुलभ बनाया जाएगा। ऐसी पाठ्यपुस्तकें अपेक्षित मानकों की उपलब्धि को किसी पाठ्यचर्या या पाठ्यक्रम के मुकाबले कही ज्यादा चिन्हित कर पाएंगी। एप्पल (2004) ने उल्लेख किया है कि स्कूल, उसकी पाठ्यचर्या और ज्ञान के बीच संबद्धता समाज की मौजूदा सामाजिक–आर्थिक संरचना को यथावत बनाए रखने पर जोर देती हैं। अपनी बातों को विस्तार देने के लिए, वह स्कूल को एक सामाजिक संस्था के रूप में देखते हैं

जो प्रमुख सामाजिक समूहों के सांस्कृतिक मूल्यों के पुनरूत्पादन करने की दिशा में काम करता है। पाठ्यपुस्तकें इसी विद्यालय तंत्र का अंग है और इनका निर्माण सामाजिक–सांस्कृतिक व्यवस्था के अनुरूप ही किया जाता हैं। विद्यालयी स्तर पर भाषा शिक्षण हेतु विद्यार्थियों एवं शिक्षकों दोनों के लिए कक्षा–शिक्षण के दौरान या कक्षा–कक्ष के बाहर पाठ्यपुस्तक को एक आवश्यक अंग के रूप में प्रयुक्त किया जाता हैं क्योंकि अन्य विषयों के अध्ययन–अध्यापन की तुलना में भाषा के अध्ययन–अध्यापन हेतु पाठ्यपुस्तक एक मुख्य तथा सहायक उपकरण के रूप में प्राचीन काल से प्रचलन में हैं (पटेल, 2017)। वहीं सामाजिक विज्ञान के विषय अकादमिक अध्ययन के वे क्षेत्र हैं जो मानव समाज और जटिल मानवीय संबंधों के विभिन्न पहलुओं का अन्वेषण करते हैं। एक न्यायपूर्ण तथा शांतिप्रिय समाज हेतु आधार निर्मित करने के लिए सामाजिक विज्ञान विषयों के दृष्टिकोण और जानकारी अपरिहार्य है (प्रसाद, 2008)। पाठ्यपुस्तकों के अभाव में औपचारिक शिक्षा को लगभग नामुमकिन माना जाने लगा है। पिछले पंद्रह–बीस सालों में पाठ्यपुस्तकों की गहराई से छानबीन की जाने लगी है की दरअसल इन पाठ्यपुस्तकों के जरिए किस प्रकार का ज्ञान दिया जा रहा है? पाठ्यपुस्तकों में किसके ज्ञान का प्रतिनिधित्व है? विभिन्न वर्गों एवं समूहों का प्रतिनिधित्व किस रूप में किया जा रहा है? (कुशवाहा, 2015)। विद्यालयों में पढ़ायी जाने वाली हिन्दी भाषा एवं समाज विज्ञान की पाठ्यपुस्तकें इस दृष्टिकोण से अपनायी जाती है की वे भाषिक बहुलता एवं सांस्कृतिक विभिन्नता का समावेशन कर सीखने की शिक्षण–सामाग्री बनने की बजाय थोपने का आग्रह न बने।

सम्बन्धित साहित्य की समीक्षा

वर्तमान में पाठ्यचर्या, पाठ्यक्रम और पाठ्यपुस्तकें तैयार करने के लिए जो पद्धति अपनायी गई है उसकी विशेषता हैं कि वह शिक्षा के लक्ष्य, अधिगम की जरूरतों एवं बच्चों के सामाजिक–आर्थिक तथा सांस्कृतिक परिवेश पर आधारित न होकर परीक्षा व्यवस्था की जरूरतों एवं तरीकों से निर्धारित होती हैं। देश के लगभग सभी स्कूलों की कक्षाओं की कार्यशैली पूरी तरह पाठ्यपुस्तकों पर निर्भर करती हैं। परिणामस्वरूप पाठ्यपुस्तकों के महत्व का दायरा व्यापक होना निश्चित है (राष्ट्रीय फोकस समूह का आधार पत्र– 2018)। यहां तक कि शिक्षक, शिक्षकों के प्रशिक्षक, पाठ्यपुस्तक लेखक, पाठ्यचर्या अभिकल्प (डिजाइनर) व शैक्षणिक योजनाकार तक की यही धारणा है जबकि शिक्षा में भाषा की भूमिका को ठीक से सराहने के लिए हमें समग्रतावादी दृष्टिकोण अपनाने की जरूरत है। हमें इसके संरचनात्मक, साहित्यिक, सामाजिक, सांस्कृतिक, मनोवैज्ञानिक एवं सौंदर्यशास्त्रीय पक्षों को महत्व देते हुए इसे एक बहुआयामी स्थिती में रखकर इसकी पड़ताल करनी होगी (राष्ट्रीय फोकस समूह का आधार पत्र, 2009)। सामाजिक और राजनैतिक मुद्दों पर इस प्रकार विचार किए जाने की आवश्यकता है ताकि विद्यार्थियों में सामाजिक न्याय के प्रति उचित जागरूकता पैदा हो जिससे सामाजिक विज्ञान का स्वाभिमान पुनर्जीवित हो सके। इतिहास के पाठ्यक्रमों ने प्रायः समाज के कई वर्गों तथा भारत के कई क्षेत्रों की उपेक्षा की है जिस पर अब ध्यान देने की आवश्यकता है (राष्ट्रीय समूह का आधार पत्र–2007)।

इकबोते (1985) ने महाराष्ट्र माध्यमिक शिक्षा परिषद् द्वारा कक्षा 1 से 10 तक के लिए अनुमोदित मराठी मातृभाषा की पाठ्यपुस्तकों का भाषा वैज्ञानिक विश्लेषण किया। जिसमें उन्होंने पाया की पाठ्यपुस्तक विशेषज्ञों की समझ तथा छात्रों की समग्र क्षमता को समावेशित नहीं कर सकी। परिणामस्वरूप पाठ्यपुस्तकें विद्यार्थियों में भाषागत विकास उत्पन्न करने में अनुपयुक्त रहीं।

कुमार (2003) ने अपने आलेख ''पाठ्यपुस्तकों की हिन्दी'' में वर्णित किया हैं कि स्कूल में पढ़ाई जाने वाली हिन्दी दरअसल एक प्रतीक भाषा ही है। उसे पढ़ाकर शिक्षक और उसे पढ़कर बच्चे राष्ट्रनिर्माण करने का सुख पाते है, लेकिन एक भाषा पर अधिकार का आनंद नहीं।

झा (2006) ने अपने शोध टिप्पणी में कहा कि स्कूली पाठ्यपुस्तकों पर गंभीर विमर्श की परम्परा नहीं के

बराबर रही है। परिवर्तन और बदलाव के स्तर पर समाज–विज्ञान एवं हिन्दी की पाठ्यपुस्तकों में क्रांतिकारी परिवर्तन किये गए है।

सिंह (2013) ने राजस्थान की हिंदी विषय की कक्षा 1, 4 और 5 की नई पाठ्यपुस्तकों पर चर्चा किया जिसमें पाठ्यपुस्तक विश्लेषण के परिणामस्वरूप, हिन्दी की इन पाठ्यपुस्तकों की साजसज्जा, आकार–प्रकार, चित्र, आवरण, इबारत का आकार और अभ्यास आदि पहले की पाठ्यपुस्तकों की अपेक्षा बेहतर हुई है, वहीं पाठ्यपुस्तक निर्माताओं में बच्चों की रचनात्मकता को उभारने के लिए कल्पनाशीलता का अभाव नजर आता हैं।

भारद्वाज (2016) ने अपने शोध आलेख के अध्ययन में बताया है कि प्रयुक्त किताबें बच्चों को विवेकवान, कल्पनाशील और तर्कशील व्यक्ति की बजाय रट्टू तोते व सिर झुका आज्ञा का पालन करने वाले और चिंतन में अक्षम व्यक्ति के तौर पर विश्लेषित करती नजर आती है।

पटेल (2017) ने हिन्दी भाषा कि प्रचलित पाठ्यपुस्तकों की गुणवत्ता के अध्ययन में पाया की प्रचलित पाठ्यपुस्तकें मानक के अनुसार संतोषजनक हैं, परन्तु उच्च गुणवत्ता वाली नहीं कही जा सकती। साथ ही सामाजिक एवं सांस्कृतिक संदर्भयुक्तता की गुणवत्ता के आधार पर केन्द्रीय माध्यमिक विद्यालयों में हिन्दी भाषा की प्रचलित पाठ्यपुस्तकों की गुणवत्ता यू०पी०, सी०बी०एस०ई० एवं संस्कृत बोर्ड की तुलना में उच्च स्तर की है।

पाठ्यपुस्तकें एवं समावेशन

शिक्षा समवर्ती सूची का विषय है, अतः वह केन्द्र और राज्य दोनों के नियंत्रणाधीन हैं। इस हेतु राष्ट्रीय स्तर पर कार्य करने के लिए एनसीईआरटी (राष्ट्रीय शैक्षिक अनुसन्धान एवं प्रशिक्षण परिषद) है तो राज्यों में इसी तर्ज पर एससीआरटी (राज्य शैक्षिक अनुसन्धान एवं प्रशिक्षण परिषद) जैसी संस्थाएं स्थापित हैं। जिनके द्वारा नियमित अंतराल पर पाठयपुस्तकों में बदलाव एवं संशोधन किया जाता हैं।

शिक्षा का लक्ष्य एक समतामूलक समाज के निर्माण की दिशा में योगदान देना तथा किसी भी समुदाय के प्रति किसी भी प्रकार का विभेद न करना है (यूनेस्को, 2004)। बच्चों की शिक्षा के जो शुरुआती साल होते हैं, वह उनकी मानसिक संरचना को गढ़ने में कारगर भूमिका निभाते हैं। उनके लिए वैधानिक ज्ञान का मतलब ही पाठ्यपुस्तकों में वर्णित सूचनाएं होती हैं। पाठ्यपुस्तकों के जरिए न्यायपूर्ण, समरस तथा बराबरी का समाज बनाने के उद्देश्य की अपेक्षा की जाती है। लोकतांत्रिक व्यवस्था के लिए यह अधिक महत्वपूर्ण है की विद्यालयों में पढ़ाई जाने वाली पाठ्यपुस्तकों में सभी वर्गों का प्रतिनिधित्व और विविधता की झलक दिखाई दे। बजाय इसके बेसिक शिक्षा परिषद द्वारा संचालित कक्षा 6 से 8 तक की हिंदी भाषा की पाठ्यपुस्तकों में हिंदू धर्म के देवी/देवताओं, प्रतीकों तथा पौराणिक कथाओं का ही चित्रण हैं। वही सामाजिक विज्ञान की पाठ्यपुस्तकों में दलितों व अल्पसंख्यकों का प्रतिनिधित्व नगण्य हैं। अंबेडकर का उल्लेख सामाजिक विज्ञान की पाठ्यपुस्तक में एक बार आया है, लेकिन उन्हें सिर्फ दलितों का मसीहा एवं संसद में दलितों के लिए सीटों को आरक्षित करने वाले के रूप में दर्शाया गया है, उनके रेडिकल पक्ष का जिक्र पाठ्यपुस्तक में नहीं है। वही अनुसूचित जनजातियों का वर्णन हिंदी एवं सामाजिक विज्ञान की पाठ्यपुस्तकों में नगण्य हैं। इतिहास के पाठों में राजाओं या शासक वर्गों और उनके कार्यों, युद्धों से सम्बन्धित सूचनाएं जहां प्रमुखता से वर्णित हैं वहीं महिला शासिकाओं (रजिया सुल्तान एवं नूरजहां) का वर्णन यदा – कदा तो आम – जनजीवन एवं उनके योगदानों का उल्लेख कहीं नहीं मिलता है।

जेंडर एवं भाषा

यह बात अत्यन्त महत्वपूर्ण है कि पाठ्यपुस्तक लेखक और शिक्षक इस तथ्य को स्वीकार करें की निष्क्रिय व हेय समझी जानी वाली भूमिकाएं, जिनसे स्त्रियों को स्वभावतः जोड़कर देखा जाता रहा है, सामाजिक–

सांस्कृतिक रूप से निर्मित है और इन्हें जितनी जल्दी हो सके नष्ट करने की जरूरत हैं (भारतीय भाषाओं का शिक्षण, 2009)। भाषा स्कूली पाठ्यक्रम का अभिन्न अंग है व यह सभी विषयों के लिए आवश्यक है क्योंकि सभी विषयों का शिक्षण भाषा के द्वारा ही होता है (कुशवाहा, 2014)। बेसिक शिक्षा परिषद द्वारा संचालित हिन्दी भाषा की पाठ्यपुस्तकों लेखकों (पुरुष) की तुलना में लेखिकाओं (स्त्रियों) की रचनाओं को सम्मिलित करने का अनुपात कम है। अधिकांश पाठों जैसे – सच्ची वीरता, आत्मनिर्भरता, कर्मवीर आदि में प्रयुक्त सर्वनाम एवं विशेषण पुरुष पात्रों को ही इंगित करता हैं एवं इन पाठों की भाषा भी पुरुष केंद्रित है। पाठ्यपुस्तक में देशभक्ति एवं सेना से सम्बन्धित जितने भी उद्धरण उन सभी पाठों में सैनिक वेशभूषा में पुरुष पात्रों का ही चित्रण किया गया हैं यद्यपि स्वतंत्रता सेनानियों के रूप में स्त्रियों की भूमिका दर्ज हैं, परंतु वह भी संक्षिप्त रूप में (झांसी की रानी पाठ को छोड़कर)। अध्ययन में प्रयुक्त कक्षा 6 की हमारा इतिहास एवं नागरिक जीवन नामक पाठ्यपुस्तक में मानव के विकास क्रम को इंगित किया गया है, जिसमें मानव के लिए प्रयुक्त चित्र पुरुषों के है तथा वाक्यों में प्रयुक्त क्रियापद भी पुलिंग हैं। जेंडर भूमिकाएं भाषा के स्वरूप को प्रभावित करती है। भाषा सीखने की प्रक्रिया हमें जेंडर से जुड़ी सामाजिक – सांस्कृतिक वास्तविकताओं का परिचय देती हैं (भाषा शिक्षण, 2018)।

अतः पाठ्यपुस्तकों में उद्धृत शब्द, चित्र जो महिलाओं और पुरुषों को परंपरागत भूमिकाओं में समेटे हुए है, उनमें सुधार कर उसे एक विस्तृत दायरे में प्रस्तुत किए जाने की आवश्यकता है।

निष्कर्ष

पाठ्यचर्या और पाठ्यपुस्तकों में विविधता लाने और इन्हें विकेंद्रीकृत बनाने की प्रक्रिया में विगत वर्षों की अनिश्चितता यह आवश्यकता सामने रखती है कि व्यापक राष्ट्रीय लोकतांत्रिक दृष्टि से पाठ्यचर्या को गुणवत्तापूर्ण और सामान्य स्तर के योग्य बनाने की दिशा में उपयुक्त प्रयासों की तत्काल आवश्यकता है (एनसीईआरटी, 2008)। विद्यार्थियों के ज्ञान के निर्माण में पाठ्यपुस्तकें एक महत्वपूर्ण उपकरण है। इसीलिए जब बच्चें स्कूल की दुनिया में कदम रखते हैं तो वे जिन शब्द, चित्र एवं भाषायी तथा सामाजिक संसार से परिचित होते है उन्हें गढ़ने में इन पुस्तकों का महत्वपूर्ण योगदान होता है। यदि पाठ्यपुस्तकें किसी खास प्रभुत्व वाले वर्ग, धर्म, जाति एवं जेंडर का प्रतिनिधित्व करने की दिशा में अग्रसारित होते हैं तो इनकी उपयोगिता बेहद संदिग्ध होती है। पाठ्यपुस्तक निर्माण की प्रक्रिया में सचेतन रूप से यह प्रयास किए जाने की आवश्यकता है कि हाशिए पर स्थित समूहों, उनसे संबंधित मुद्दों एवं उनकी पहचान को स्थान देकर इन्हें अधिक समावेशी बनाया जाय। यह शिक्षा व्यवस्था की जिम्मेदारी है कि वह विभिन्न सामाजिक श्रेणियों और समूहों को पास लाए और एक समतावादी और समाकालित समाज का सृजन हो (माध्यमिक शिक्षा आयोग,1952)।

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उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण का अध्ययन

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Abstract

Corporal punishment is a matter of national and international issue. Corporal punishment has a profound impact on children's progress, yet it is rampant in schools. In many countries it is not legally valid but still it is being used practically. Despite the ban on corporal punishment of children enshrined in the right to education, even today this type of violence is often done with children in educational institutions and homes. Through this paper, an attempt has been made to find out what is the attitude of upper primary school students towards corporal punishment. For which 100 students have been selected through random sampling method and a self-made physical punishment scale questionnaire has been used to know their attitude. Common methods of statistics such as mean, standard deviation and t-test have been used to obtain the results. As a result of the study, it was found that the attitude of upper primary school students towards corporal punishment is very negative. If they are punished physically in the school, then mental stress arises in them which affect their teaching work.

Keywords : *Corporal Punishment ,Upper Primary School, Attitude, Mental Stress*

शिक्षा एक जीवन पर्यंत चलने वाली प्रक्रिया है। हमारे जीवन के हर क्षण में हम कुछ न कुछ सीखते रहते है। यह औपचारिक एवं अनौपचारिक दोनों रूपों में हो सकती है। शिक्षा हमें हमारी सम्भावित क्षमताओं को समझने में सहायता प्रदान करती है। आधुनिक काल में शिक्षा का अर्थ किसी तरह का उपदेश या सूचना देना नहीं होता है बल्कि यह शक्तियों के सर्वांगीण विकास के लिए एक निरंतर चलने वाली ऐसी प्रक्रिया है जिसके द्वारा व्यक्ति में निहित क्षमताओं का सही–सही उपयोग विभिन्न सामाजिक परिस्थितियों में किया जाता है। जैसा कि गाँधी जी ने कहा है "शिक्षा से मेरा अभिप्राय बालक और मनुष्य के शरीर, मन और आत्मा के सर्वांगीण विकास से है।" प्रत्येक राष्ट्र के जीवन में प्राथमिक शिक्षा प्रथम प्राथमिकता की वस्तु है। यह पहली सीढ़ी है जिसे सफलतापूर्वक पार करके ही कोई राष्ट्र अपने अभीष्ट लक्ष्य तक पहुँचता है। राष्ट्रीय जीवन के साथ जितना घनिष्ठ सम्बन्ध प्राथमिक शिक्षा का है उतना माध्यमिक व उच्च शिक्षा का नहीं है। राष्ट्रीय विचारधारा एवं चरित्र का निर्माण करने में जितना महत्वपूर्ण स्थान इसका है उतना किसी दूसरी सामाजिक, राजनैतिक या शैक्षणिक गतिविधि का नहीं है। इसका सम्बन्ध किसी विशेष व्यक्ति या वर्ग से ना होकर देश की पूरी जनसंख्या से होता है। इसका हर कदम पर हर व्यक्ति के जीवन से सम्पर्क होता है। अतः बिना किसी भेदभाव एवं शारीरिक दण्ड के प्रत्येक बच्चे का प्राथमिक शिक्षा ग्रहण करने का अधिकार है। शारीरिक दण्ड बच्चों के कोमल मन में नकारात्मक मनोविकार पैदा करता है जो बच्चों को चिड़चिड़ा बना देता है साथ ही उसके मन में आक्रोश और डर की भावना बैठ जाती है। बच्चों को अनुशासित करने का हक हमारा है परन्तु हमें उनके सामाजिक, मानसिक विकास तथा साझेदारी के हक पर अतिक्रमण करने का अधिकार नहीं है। हर सामाजिक गतिविधियों में शामिल होने का हक ही उन्हें अनुशासित बनाता है। कोई भी धर्म या कानून शारीरिक दण्ड की अनुमति नहीं देता है।

अध्ययन की आवश्यकता

देश में शारीरिक दण्ड को खत्म करने के लिए विधायी ढाँचें के बावजूद भी देशभर के स्कूलों और संस्थाओं में बच्चों को शारीरिक दण्ड दिया जा रहा है। अभी वर्तमान समय में कई ऐसे मामले उजागर हुए हैं।

निःशुल्क एवं बाल शिक्षा का अधिकार अधिनियम, 2009 (RTE, 2009) के अध्याय 4 के अनुच्छेद 17 (1) में कहा गया है कि–"किसी बालक को शारीरिक दण्ड नहीं दिया जायेगा या उसका मानसिक उत्पीड़न नहीं किया जायेगा" यदि कोई व्यक्ति जो उपधारा (1) के उपबन्धों का उल्लंघन करेगा तो ऐसा व्यक्ति लागू सेवा नियमों के अधीन अनुशासनिक कार्यवाई का उत्तरदायी होगा। शिक्षा के अधिकार में निहित बच्चों को शारीरिक दण्ड देने पर प्रतिबन्ध के बावजूद आज भी शिक्षा संस्थानों और घरो में बच्चो के साथ इस प्रकार की हिंसा अक्सर की जाती है। यह एक ऐसा सामाजिक कुटेव है जिसकी नीतिगत आलोचना भी होती है और जिसके ऊपर मीडिया भी प्रकाश डालता रहता है लेकिन इसका असर न तो अभिभावकों पर पड़ता है और न ही स्कूल प्रशासन प्रभावित होता है। ये दोनों ही दायरे इस आलोचना की अनसुनी करने और इसको दबाने के लिए हमेशा तैयार रहते हैं।

शारीरिक दण्ड से सम्बन्धित अनेक अध्ययन हुए हैं, जिनमें कुछ लोगों ने शारीरिक दण्ड को प्राचीन परम्परा से जोड़ कर देखा तो कुछ नहीं वर्तमान परिस्थितियों में शारीरिक दण्ड का अध्ययन किया।

नेविने (2012) ने अपने अध्ययन में बताया कि अभिभावकों का अटूट विश्वास परंपरागत दण्ड मान्यताओं पर है। इन मान्यताओं के अनुसार शारीरिक दण्ड छात्रों के अधिगम स्तर में सुधारात्मक व्यवहार के लिए और कक्षा में शिक्षकों की सम्माननीय स्थिति को बनाए रखने में मददगार है।

पूनम बत्रा (2009) इस समस्या की जड़ों को वयस्कों की अनुमति में देखते हुए कहती हैं कि शारीरिक दण्ड को एक सामाजिक सांस्कृतिक यथार्थ के तौर पर देखने की आवश्यकता है। वयस्क हुआ बालक के मध्य असमान शक्ति संबंध के कारण यह समस्या प्रतिदिन कक्षा की एक संस्कृति के रूप में उभरती है। अधिकतर विद्यालयों में बालक व शिक्षा के सामाजिक आर्थिक व सांस्कृतिक स्तर में अन्तर इस समस्या के केन्द्र में है। अलग–अलग पृष्ठभूमि से आने वाले बालकों के सन्दर्भों को शिक्षक नहीं समझ पाते हैं। वही साथ ही अधिकतर शिक्षा और प्रशिक्षण संस्थान मौन को ही कक्षा का यथार्थ मानते हैं।

गुरुग्राम में एक गैर सरकारी संगठन अग्रसर (नवंबर 2018) में अपने अध्ययन में बताया कि अभी 80 फ़ीसदी बच्चे शिक्षकों द्वारा दण्डित किए जाते हैं। औसत 43% बच्चों ने कहा कि उन्हें सप्ताह में तीन बार नियमित रूप से पीटा जाता है। रिपोर्ट में बताया गया है कि शारीरिक दण्ड से जुड़े भय और तनाव से 'स्कूल फोबिया' पैदा हो सकता है जिससे ड्रॉपआउट, कम प्रतिधारण दर और खराब अकादमिक स्कोर बढ़ते हैं जो शिक्षा परिणामों पर काफी प्रभाव डालते हैं।

मसलन, साथचेरीटेबल ट्रस्ट (2006) ने अपने शोध अध्ययन में बताया है कि भारतीय विद्यालयों और घरों में शारीरिक दण्ड को जीवन शैली के रूप में स्वीकृति प्राप्त है। इसमें सामान्य रूप से माना जाता है कि शारीरिक दण्ड बच्चों के पालन–पोषण का महत्वपूर्ण भाग है। दूसरा, बच्चे मारपीट के माध्यम से ही अध्यापकों व अभिभावकों को आदर करना जिसमां नियमों का पालन करना और मेहनत करना सीखते हैं। बिना शारीरिक दण्ड के बच्चे बर्बाद एवं अनुशासनहीन हो जाएंगे।

दुब्नोसकी (1983) ने शिक्षकों के मानस में अनुशासन और दण्ड के आपसी रिश्ते का अध्ययन किया। इसके अनुसार शारीरिक दण्ड को प्रस्तावित करने वालों ने यह बताया कि शारीरिक दण्ड हमारे व्यवहार में कमी लाता है, सीखने में सहायक होता है, चरित्र निर्माण करता है, प्राधिकारी शक्ति प्रशासन नियमों के प्रति सम्मान का भाव आदि सिखाता है। वे मानते हैं कि शारीरिक दण्ड से तुरन्त एवं माननीय परिणाम मिल सकते हैं।

American Academy of Pediatrics (1930) ने अपने एक अध्ययन में कहा है कि स्कूलों में शारीरिक दण्ड के उपयोग के लिए तीन व्यापक तर्क हैं। पारम्परिक धर्म पर आधारित मान्यताएँ हैं कि वयस्कों का अधिकार है यदि बालक कर्तव्यपरायण नहीं है, तो दुर्व्यवहार करने वाले बच्चों को शारीरिक रूप से दण्डित कर सकता है। एक अनुशासनात्मक दर्शन कि शारीरिक दण्ड चरित्र का निर्माण करता है, बच्चे के विवेक के विकास और वयस्क प्राधिकरण के आँकड़ों के प्रति उनके सम्मान के लिए आवश्यक है और शिक्षकों की जरूरतों और

अधिकारों से सम्बन्धित विश्वास, विशेष रूप से कि कक्षा में व्यवस्था और नियंत्रण बनाए रखने के लिए शारीरिक दण्ड आवश्यक है।

"शारीरिक दण्ड बच्चे को संकेत देता है कि पारस्परिक संघर्षों को निपटाने का एक तरीका शारीरिक बल का उपयोग करना और दर्द देना है।"

Society for Adolescent Medicine (1968) के अनुसार– "स्कूलों में शारीरिक दण्ड का उपयोग एक बहुत ही अनिश्चित संदेश को बढ़ावा देता है कि हिंसा हमारे समाज में एक स्वीकार्य घटना है। यह इस धारणा को मंजूरी देता है कि हमारे बच्चों के प्रति हिंसक होना मेधावी है। जिससे समाज की नज़र में उनका अवमूल्यन होता है। यह बच्चों को हिंसा का सहारा लेने के लिए प्रोत्साहित करता है क्योंकि वे अपने अधिकार के आँकड़े देखते हैं या माता–पिता को ऐसा करते हुए देखते हैं।"

रॉबर्ट टर्नर (1989)ने अमेरिकी विद्यालयों में शारीरिक दण्ड के प्रयोग की जड़ों की तलाश इतिहास में की है। उनके अनुसार 1930 में जब अमेरिका के विद्यालयों में शारीरिक दण्ड के मुद्दे को उठाया गया तब वहाँ यह कोई नया मुद्दा नहीं था। अमेरिका में यह विश्वास किया जाता था कि भारतीयों को यूरोपियन मानदण्डों के अनुसार व्यवहार का अनुकूलन करने की आवश्यकता है। आधारभूत अवधारणा यह थी कि स्थानीय बच्चे (भारतीय) तत्परता से अपने व्यवहार को बदल पाने में असमर्थ हैं अतः शारीरिक दण्ड के द्वारा अनुशासन की स्थापना न्यायपूर्ण है। ऐतिहासिक रूप से शारीरिक दण्ड को यह कहते हुए समर्थन दिया जाता था कि यह शैक्षिक प्रशिक्षण, आज्ञाकारिता तथा समाज में नैतिक ताना–बाना बनाए रखने में सहायक है।

इसलिए यह आवश्यक हो जाता है कि वर्तमान समय में इसका अध्ययन किया जाए।

अध्ययन का उद्देश्य

1. उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण का अध्ययन करना।
2. उच्च प्राथमिक विद्यालय के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण का लिंग (छात्र/छात्रा) के आधार पर अध्ययन करना।
3. उच्च प्राथमिक विद्यालय के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण का विद्यालय प्रकार (शासकीय/अशासकीय) के आधार पर अध्ययन करना।

अध्ययन की शून्य परिकल्पनाएँ

H_{01} उच्च प्राथमिक विद्यालयों के छात्र व छात्राओं का शारीरिक दण्ड के प्रति दृष्टिकोण में कोई सार्थक अंतर नही है।

H_{02} शासकीय एवं अशासकीय उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण में कोई सार्थक अंतर नही है।

अध्ययन की परिसीमाएँ

- यह शोधपत्र केवल फतेहपुर शहर तक ही सीमित है।
- यह शोधपत्र केवल उच्च प्राथमिक विद्यालय के विद्यार्थियों पर केन्द्रित है।

अध्ययन की विधि

प्रस्तुत अध्ययन में सर्वेक्षण विधि का प्रयोग कर उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण का अध्ययन करने से सम्बन्धित सूचनाएँ एकत्रित की गई हैं।

जनसंख्या एवं प्रतिदर्श चयन

उच्च प्राथमिक शासकीय एवं अशासकीय विद्यालय जो यूपी बोर्ड एवं सी.बी.एस.ई. बोर्ड से सम्बद्ध है, के विद्यार्थियों को जनसंख्या के रूप में लिया गया है और 100 विद्यार्थियों का यादृच्छिक प्रतिचयन विधि के माध्यम से चयन किया गया है।

प्रयुक्त उपकरण

शारीरिक दण्ड मापनी

छात्र–छात्राओं के अभिमत संकलन हेतु स्वनिर्मित उपकरण शारीरिक दण्ड मापनी का प्रयोग किया गया है। जिसमें 25 पद लिए गए हैं। उत्तर के लिए लिकर्ट के पंचपदीय प्रणाली पर आधारित 5 बिंदु पूर्णतः सहमत, सहमत, अनिश्चित, असहमत, पूर्णतः असहमत लिए गए हैं। शारीरिक दण्ड मापनी में प्रत्येक कथन के सामने 5 विकल्प दिए गए हैं। पूर्ण सहमत, सहमत, अनिश्चित, असहमत, पूर्ण असहमत सकारात्मक कथन के लिए क्रमशः 5,4,3,2,1 तथा नकारात्मक कथन के लिए क्रमशः 1,2,3,4,5 अंक निर्धारित किये गए हैं। उपकरण की विश्वसनीयता Cronbach Alpha द्वारा ज्ञात की गयी है जिसका विश्वसनीयता स्तर 0.701, प्राप्त हुआ है। प्रयुक्त उपकरण 'शारीरिक दण्ड मापनी' की वैधता शिक्षा, समाजशास्त्र और प्रबन्धन विशेषज्ञों के परामर्श से स्थापित की गई है।

प्रदत्त आँकड़ों के विश्लेषण की विधि

सांख्यिकीय अध्ययन हेतु सांख्यिकी की सामान्य विधियों जैसे मध्यमान, मानक विचलन तथा टी–टेस्ट का उपयोग किया गया है।

परिणाम

तालिका 01 : उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण

विद्यार्थियों की संख्या	माध्य	मध्यिका	बहुलक	मानक विचलन
100	80.54	80	80	8.788675

उच्च प्राथमिक विद्यालयों के विद्यार्थियों का मध्यमान 80 है तथा गणना में प्रयुक्त उपकरण का मध्यमान 75 है। अतः परिणाम से यह ज्ञात होता है कि उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण नकारात्मक है।

तालिका 02 : उच्च प्राथमिक विद्यालयों के छात्र एवं छात्राओं के मध्य टी–परीक्षण

क्र.सं.	लिंग	संख्या	मध्यमान	मानक विचलन	टी-परीक्षण	सार्थकता स्तर 0.05 पर
1	छात्र	50	82.40	9.23	1.724	सार्थक अंतर नही है।
2	छात्राएँ	50	79.04	8.13		

उच्च प्राथमिक स्तर के छात्रों का मध्यमान 82.40 तथा मानक विचलन 9.23 है तथा छात्राओं का मध्यमान 79.04 मानक विचलन 8.13 है। इन दोनों के मध्य टी–परीक्षण का मान 0.05 सार्थकता स्तर पर 1.724 है जो टेबल मान 1.984 से कम है। अतः शून्य परिकल्पना "उच्च प्राथमिक विद्यालयों के छात्र व छात्राओं का शारीरिक दण्ड के प्रति दृष्टिकोण में कोई सार्थक अंतर नही है" अस्वीकार नहीं की जाती है। उपर्युक्त परिणाम से स्पष्ट होता है कि छात्र एवं छात्राओं के मध्य शारीरिक दण्ड के प्रति दृष्टिकोण में कोई सार्थक अंतर नहीं है।

तालिका 03 : शासकीय एवं अशासकीय विद्यालयों के विद्यार्थियों के मध्य टी–परीक्षण

क्रम.संख्या	विद्यालय	विद्यार्थियों की संख्या	मध्यमान	मानक विचलन	टी-परीक्षण	सार्थकता स्तर 0.05 पर
1	शासकीय	50	76.56	7.759	3.333	सार्थक अंतर है।
2	अशासकीय	50	82.5	7.969		

उच्च प्राथमिक स्तर के शासकीय विद्यालय के विद्यार्थियों का मध्यमान 76.56 तथा मानक विचलन 7.759 है। अशासकीय विद्यालय के विद्यार्थियों का मध्यमान 82.5 मानक विचलन 7.969 है। इन दोनों के मध्य सार्थकता स्तर 0.05 पर टी–परीक्षण का मान 3.333 है जो टेबल मान 1.984 से अधिक है, अतः शून्य परिकल्पना "शासकीय एवं अशासकीय उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण में कोई सार्थक अंतर नहीं है" अस्वीकार की जाती है। उपर्युक्त परिणाम से स्पष्ट होता है कि शासकीय एवं अशासकीय उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण में सार्थक अंतर है।

शारीरिक दण्ड मापनी प्रश्नावली में प्रयुक्त प्रश्नों के माध्यम से निम्न परिणाम प्राप्त हुए हैं –

- उच्च प्राथमिक विद्यालयों के छात्र एवं छात्राओं के मध्य शारीरिक दण्ड के प्रति दृष्टिकोण एक समान है।
- शासकीय एवं अशासकीय उच्च प्राथमिक विद्यालयों के विद्यार्थियों का शारीरिक दण्ड के प्रति दृष्टिकोण में भिन्नता है।
- जब विद्यार्थी गृहकार्य करके नहीं लाते हैं तो अधिकतर विद्यार्थियों को दंडित किया जाता है।
- जब शिक्षक विद्यार्थियों को शारीरिक दण्ड देता है तो अधिकतर विद्यार्थी यह मानते हैं कि वह उस शिक्षक का विषय जल्दी सीख जाते हैं।
- जब विद्यार्थी कोई गलत व्यवहार करते हैं और यदि उसके लिए उन्हें शरीर दण्ड दिया जाता है तो वह उस व्यवहार को दोहराने से बचते हैं।
- शारीरिक दण्ड मिलने के बाद कुछ विद्यार्थियों का यह मानना है कि उनके शिक्षण कार्य में बाधा उत्पन्न होती है जबकि कुछ का मानना हैं कि शारीरिक दण्ड मिलने के बाद उनके शिक्षण कार्य में कोई बाधा उत्पन्न नहीं होती है।
- अधिकतर विद्यार्थियों का यह मानना है कि यदि वह प्रश्नों का उत्तर नहीं दे पाते हैं तो उन्हें शारीरिक दण्ड नहीं दिया जाना चाहिए जबकि कुछ का मानना यह भी है कि प्रश्नों का उत्तर न दे पाने के कारण उन्हें दंडित करना चाहिए।
- अधिकतर विद्यार्थी यह मानते हैं कि शिक्षा और शारीरिक दण्ड एक दूसरे से सम्बन्धित हैं।
- शारीरिक दण्ड मिलने की वजह से विद्यार्थियों में मानसिक तनाव बना रहता है।
- अधिकतर विद्यार्थी यह मानते हैं कि शारीरिक दण्ड देना शिक्षकों का अधिकार होता है।
- शारीरिक दण्ड मिलने की वजह से विद्यार्थी विद्यालय छोड़ सकते हैं जबकि कुछ का मानना है कि विद्यालय के छोड़ने और शारीरिक दण्ड का कोई संबंध नहीं है।
- विद्यालय में शारीरिक दण्ड की वजह से भेदभाव बढ़ता है।

निष्कर्ष

शारीरिक दण्ड पर उच्च प्राथमिक विद्यालयों के विद्यार्थियों का दृष्टिकोण काफी नकारात्मक पाया गया है लेकिन कुछ प्रश्नों के जवाब सकारात्मक भी रहे हैं। जैसे विद्यालय में थोड़ी बहुत सजा मिलना जरूरी है जिससे बच्चे अपना कार्य समय पर करते हैं भले ही वह डरकर कार्य करके लाते हैं। गलती करने पर शिक्षकों का मारना अधिकतर बच्चों द्वारा सही ठहराया गया है उनका मानना है कि इससे उनमें गलती करने की सम्भावना कम हो जाती है। जब बच्चे कक्षा में शोर मचाते हैं, भागते हैं तब सजा दी जाती है। बिना किसी उचित कारण के दण्ड नहीं दिया जाता है। विद्यार्थियों का मानना है कि यदि उन्हें विद्यालय में शारीरिक रूप से दण्डित किया जाता है तो उनमें मानसिक तनाव उत्पन्न हो जाता है जो उनके शिक्षण कार्य को प्रभावित करता है। शारीरिक दण्ड की वजह से बच्चों में विद्यालय छोड़ने की सम्भावना बढ़ जाती है, जिससे वे आगे की शिक्षा नहीं ग्रहण कर पाते हैं। ऐसे शिक्षक जो डरा कर या दण्ड देकर पढ़ाते हैं उनका विषय पढ़ने में बच्चों की कोई रुचि नहीं होती है लेकिन फिर भी उनकी कक्षा में आना पड़ता है और डर के कारण विषय को सीखने में बच्चों को काफी कठिनाई का सामना करना पड़ता है। बच्चों से जब प्रश्न पूछा जाता है यदि वे उसका उत्तर दे पाने में असमर्थ होते हैं तो उन्हें दण्डित नहीं किया जाना चाहिए।

शैक्षिक निहतार्थ

इस लघु शोध के माध्यम से अध्यापकों द्वारा यह सुनिश्चित किया जा सकता है कि शारीरिक दण्ड के प्रति विद्यार्थी अपना कैसा दृष्टिकोण रखते हैं और वे इससे किस प्रकार प्रभावित हो सकते हैं। जब यह जानकारी एक अध्यापक के पास होगी तो अपने शिक्षण कार्य को वह बच्चों की आवश्यकता अनुसार बदल सकता है जिससे विद्यार्थी शैक्षिक प्रगति की ओर अग्रसर होंगे और शारीरिक दण्ड में कमी लाई जा सकती है।

अध्यापकों के लिए सुझाव

विद्यालयों में बच्चों को सजा देना एक आम बात हो गई है। यदि कोई विद्यार्थी समय पर अपना कार्य नहीं पूरा करता है तो अध्यापकों द्वारा उसे दण्डित किया जाता है। लेकिन क्या कभी अध्यापकों ने यह सोचा है कि इससे बच्चे के ऊपर क्या असर पड़ता होगा? बाल–मनोविज्ञान के अनुसार बच्चे को दण्डित करने के बजाय उसे प्यार से समझाना चाहिए। अतः प्रस्तुत शोध के आधार पर अध्यापकों के लिए निम्नलिखित सुझाव हो सकते हैं–

- यदि कोई विद्यार्थी कार्य पूरा नहीं करता है तो अध्यापक को दण्डित करने के बजाय यह जानने का प्रयास करना चाहिए कि उसके कार्य को पूरा न करने का क्या कारण हो सकता है, जिससे उसमें सुधार किया जा सके।
- विद्यार्थियों को अनुशासन में रखने के लिए उन्हें दण्डित करने के बजाय उन्हें अनुशासन के महत्व को समझाएँ और स्वयं भी अनुशासन में रहकर एक आदर्श प्रस्तुत कर सकते हैं।
- विद्यार्थियों की रूचि के अनुसार शिक्षण सहायक सामग्री का उपयोग करते हुए अध्यापक को शिक्षण कार्य करना चाहिए जिससे कक्षा में सकारात्मक वातावरण बना रहे।
- अध्यापकों को बिना किसी शारीरिक दण्ड के शिक्षण कार्य करना चाहिए।
- अध्यापकों को शिक्षा का वातावरण भयरहित रखना चाहिए जिससे प्रत्येक विद्यार्थी अपने प्रश्न सरलता से पूछ सके एवं अध्यापक के सामने अपने विचार रख सके।
- कक्षा में भेदभाव को बढ़ावा नहीं देना चाहिए।
- अध्यापकों को बच्चों के मानसिक स्तर के अनुसार प्रश्न पूछना चाहिए जिससे वह समझ सकें और उनका उत्तर दे सकें।

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