SUMMARY
SUMMARY

Introduction

Education in India can be traced in the Vedic age, from the age of Upanishads, the Gita, the Buddhist and Jain scriptures, Smritis etc. to the pre-post colonial systems of traditional education as essentially a philosophers, according to Kabir (1961), regard education as essentially a process of drawing out what is implicit in the individual and to develop his latent potentialities till they become actualities. The philosophical thinking of eminent personalities like Sri Aurobindo, Rabindranath Tagore, J. Krishnamurti, Swami Vivekananda, Mahatma Gandhi and others, have influenced the system of education in India, Gandhi’s Basic Education Scheme (Bunyadi Talim) formed the basis for various education committees which were formed during the independence period. For Gandhi, "true education is one in which the individual develops his character, trains his facilities and leams to control his passions in the service of the community. Tagore focused on education which seeks fulfillment through harmony with all things. He also felt that education to be truly creative, should be in full touch with the complete life of people economic, intellectual, aesthetic, social and spiritual. Tagore and Gandhi believed that the aim of education is the total development of the human personality.

Sri Aurobindo too has placed emphasis on all round development of the personality, which includes education of the senses, body mind, moral and religious education. Vivekananda's educational thought laid emphasis on realization of the perfection already in man. He placed greatest stress on education as the gradual unfolding of the intrinsic quality of the individual and was of the view that no knowledge comes from outside. According to Iqbal, the essential purpose of education is to develop man's individuality and felt that education should ensure the possibility of eternal progress. The educational philosophies of Indian thinkers have stressed that
education must be comprehensive and should aim at the development of the total personality of the individual in harmony with society and nature.

**Need and Importance of the Study**

All this may be true. But the demand for Indianisation has to be carefully understood and assessed its genuine intentions are to be realized. In the first place, one has to think of how far one can stretch the meaning of 'Indianisation'. Indian philosophical thinking enjoys a distinctiveness with its emphasis on reason, intuition, analytical and synthetic thinking. Definitely these should inform the approaches to the understanding of Indian educational issues. At the same time, Indianisation should not be taken to mean refusal to take due note of recent development in the area of philosophy of education elsewhere solely on the basis of philosophical prejudices. Such a stance world be narrow and chauvinistic. Different socio-cultural contexts brings different educational problems and issues into focus and in different intensities. Indianisation should be manifested in the kind of the distinctly Indian concerns that it deals with and not in the refusal to adopt this of that approach solely because the approach is not of Indian origin.

Researches conducted this for have, of course, concerned themselves with distinctively Indian issues, the study of the educational philosophy of Indian thinkers and Indian systems of education, Indian scriptures and religions systems. Some of these are set in a comparative framework, generally with a model from the English speaking west, Gandhi and Dewey, Tagore and Whitehead, for example. These are also researches whose exclusive focus is an individual Western thinkers like Russell, Read or Kilpatrick. More popular, however, are researches which have adopted the framework of Western philosophy like pragmatism, existentialism or idealism. These researches have attempted to understand the educational thought of Indian educationists and educational systems with the help of philosophical theories on reality, knowledge and value associated with the deferens’s. It would be interesting to
explore these very educational themes and systems from the point of view of Indian philosophical thinking as articulated in its several schools. This, however, has not been attempted is sufficient measure.

In terms of their research themes, barring a few expectations, they continue on the trodden path. Critical comparative study of this or that educational thinker or philosopher or this or that educational ideology, school or system like Plato, Aurobindo, Armie Besant, Gandhi, J. Krishnamurty, Vivekananda, the Sikh Guru, Tagore, Gopabandhu Das, Ramkrishna Mission. Some titles, happily, indicate the aspect of the subject that is singled out for treatment, viz. integral Yoga of Aurobindo, Free progress system of Aurobindo International Centre, Synthetic Spiritualism of Sri Ramakrishna. A refreshing development is the shifting of attention from individuals and system to the critical study of ideas and concepts, creativity, freedom, human nature, explanation, ideology. While the philosophy done on these concepts and themes may still lack the requisite vigour and exacting standards, it is at least a good sign and a happy portent of things to come that the gaze of the researchers has turned to issues and themes that are both philosophically significant and educationally relevant.

Rationale of the Study

In the English speaking-west, philosophy of education underwent a transformation during the middle of this century in the wake of the emergence of the analytical movement. Analysis itself was the upshot of the philosophical 'revolution' inspired by the work of Russell, Moore and Wittgenstein earlier. The past decades have been hectic analytical activity and philosophy of education has been enriched by a variety invaluable contribution; analyses and clarification of concepts 'education', 'teaching', 'learning', 'moral education', 'equality', 'educational theory', epistemological inquiries into the basis of curriculum, and justification of curricular choices to cite only a few.
Presently, philosophy of education appears to be set for another mutation. Recent developments in the fields of science and sociology of knowledge, especially those dealing with the methodology aspects of science inquiry, have sparked off a controversy on the nature, scope and function of theories and philosophies in education. With reference to the logical status of the social sciences, it is asked whether it is right to base educational research on Sri Aurobindo's Integral education model of scientific enquiry with it aim as explanation leading to prediction and technology.

The absence of interest on the part of philosophers in the problems of education appears odd, considering the vitality of current education debate in the wake of a new National policy of Education the appointment of the National Commission on Teachers, the publication of the discussion document, challenge of Education (1985), to cite only a few. Again discussions currently going on value orientation of education and academic freedom of such other issues have not involved philosophers to the extent on could wish. Understandability, therefore, Sri Aurobindo's philosophy of education has not emerged at a vibrant, intellectual activity.

The point is that Sri Aurobindo's philosophy of education research will have functional value only when its concerns emerge from events and problems that are experienced here and now it is in this context the thematic problem oriented type of research study acquire great significance.
Conceptual Frame Work

The present research problem is based on the theoretical model (paradigm) is given below:

Theoretical model for design, process-product study of Sri Aurobindo’s Integral Education Approach

The variables involved at various aspects of paradigm are present below:-

(I) **Pre-stage**  - Students and Teachers’ characteristics age, sex, status.

(II) **Designing, Methodology & Material**  - Develop learning materials based in Aurobindo’s Integral. Education System, Teaching learning methodologies for the mental being, Text-book

(III) **Process**  - Physical exercise programme, co-operative learning, Yoga etc.

(IV) **Product**  - Conceptual understanding

  - Personality, Attitude towards Aurobindo’s Integral Education System.

(V) **Education**  - Learning outcome in term of cognitive and Non-cognitive areas

  - Formative - During the implementation of activity.
  - Summative – Effectiveness of Aurobindo’s Integral Education System.
Statement of the Problem

As highlighted above, Sri Aurobindo’s Integral Education System has a major role in teaching-learning process. Several issues can be raised in the context of Sri Aurobindo’s Educational Philosophy at school level, e.g. what are the factors those influence the effective use of Sri Aurobindo, Integral Education Systems at school level? It is high time to study the factors associated with the effectiveness of Sri Aurobindo’s Integral Education system, in terms of cognitive and non-cognitive learning outcomes of educational goals in generals and instructional objectives in specific. It is essential for school teachers and principal to consider whether Sir Aurobindo’s Integral Education System intended for use in relevant with the school education policies? How the activities session and condition can be incorporated in day to day teaching learning activities of schools? Whether the learners benefit from Sir Aurobindo’s Educational Philosophy and its activities? Impact of these activities appears to be another important indicator of quality of learners and its extensive implementation at school level. Therefore the problem for a comprehensive research problem can be stated as follows.

“A STUDY OF SRI AUROBINDO’S INTEGRAL EDUCATION AND ITS EFFECTIVENESS IN TERMS OF COGNITIVE AND NON-COGNITIVE LEARNING OUTCOMES AT THE SECONDARY SCHOOL LEVEL”.

Operational Definitions

Sri Aurobindo’s Integral Education

An education, which has accepted the goal, outlined by Sri Aurobindo and which takes into account the entire complexity of man’s nature can rightly be termed an “integral education”. For the purpose we have in view, we may adopt a Five-Fold classification of the human being.
Education to be complete must have for principle aspects relating to the five principle activities of the human being: the physical, the mental, the psychic, and the spiritual.

- **Cognitive Domain**

  The cognitive domain includes those objects, which deal with the recall or recognition of knowledge and the development of intellectual abilities and skills (Mental Being).

- **Non Cognitive Domain**

  The non-cognitive domain includes those objectives which are concerned with the changes in interest, attitudes, and values and the development of appreciations and adjustment (Physical Being, Vital Being, Psychic Being, Spiritual Being).

**Objectives of the Study**

The following objectives were formulated for the present study:

1. To study the nature and concept of Integral Education according to the Sri Aurobindo’s philosophy.
2. To study the methodology of curriculum transactions of Sri Aurobindo’s Integral Education.

3. To study the effectiveness of Sri Aurobindo’s Integral education approach in terms of cognitive variables at secondary school level.

4. To study the effectiveness of Sri Aurobindo’s Integral Education approach in terms of non-cognitive variable at secondary school level.

5. To suggest strategies of implementation of Sri Aurobindo’s Integral Education in the existing education system at the school level.

6. To undertake case study of a school being run on Sri Aurobindo philosophy of integral education and to study its implementation in the school.

Hypothesis of the Study

The present study examined the role of both the Integral Education and the Contextual factor of students on their cognitive and non-cognitive learning outcomes. Relationships in the theoretical model specifically hypothesized a priori whereas some other relationships were more exploratory. Following hypothesis were formulated for present study:

1. There is no significant difference in the cognitive learning outcomes of Sri Aurobindo’s Integral Education approach and that of traditional educational approach.

2. There is no significant difference in non-cognitive learning outcomes of Sri Aurobindo’s Integral Education approach and that of traditional educational approach.
3. There is no significant relationship between the scores on each of the five components approach and the composite score of Sri Aurobindo’s Integral Education.

Design of the Study

The study being multi-dimensional approach required comprehensive research method. Hence the design of the study incorporates Descriptive or Critical assessment, Experimental as well as Case study methods.

Critical Assessment (Content analysis)

A critical assessment was reflective of the educational philosophy of Sri Aurobindo made, keeping in mind the existing condition the country, so as to examine its relevance.

Experimental Study:

A pre test and post test control group and experimental group was adopted to study the effect of Sri Aurobindo's Integral Education on School students learning outcomes. The experimental design was used for the study which is the strongest of all research studies for drawing influence in order to establish cause or effect relationship between independent and dependent variables. Experimental field study design implies possibility of randomized treatment and possibility of effective observation at any point of time in a natural setting. A field study, if properly conducted, provides both internal and external validity and established the cause-effect relationship which can be directly applied in a real life situation. Keeping in view the several advantages and limitations of a experimental study, the schematic design of the present study was presented in the following table:
Table: Design of the Study Indicating Treatment and Tools Use

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample</th>
<th>Treatment</th>
<th>Research Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Schools</td>
<td>Exposed to Sri Aurobindo's Integral Approach</td>
<td>Attitude Scale</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td></td>
<td>Achievement Test</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td></td>
<td>Observation Schedule</td>
</tr>
<tr>
<td>Control</td>
<td>Schools</td>
<td>No exposure to Sri Aurobindo's Integral</td>
<td>Achievement Test.</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Education Approach (Traditional Method)</td>
<td></td>
</tr>
</tbody>
</table>

Case Study:

The socio-educational status of a school in which Sri Aurobindo's integral educational system operates was determined by a case study approach. Case Study of School was analyzed and evaluated the context, input, process and product of Sri Aurobindo's integral Education systems.

Sample

The sample was consisted of one district from Delhi. One zone from district and three schools from West Zone were selected through stratified random method for the study.

A group of one hundred eighty secondary class students were selected through random sampling and forty teachers from Delhi Administration, Kendriya Vidyalaya and Public School located in West Delhi through purposive sampling method for getting the learners learning outcomes in cognitive and non cognitive domains and feedback about the Sri Aurobindo's Integral Education System. The sample of students was presented below in graphic format.
Number of students from different system of schools

Total = 180 students

- Research Tools

The following research tools were developed for collecting data from students and teachers. The description of variables and tools is presented below in tabular tools.

Description of Variables and Research Tools

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Sri Aurobindo's Integral Education</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Research Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 1.</td>
<td>The Physical Being</td>
<td>Physical Exercise</td>
<td>Tolerance</td>
<td>• Observation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pranayam</td>
<td></td>
<td>Schedule</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discipline</td>
<td>Attitudes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scale</td>
</tr>
<tr>
<td>2.</td>
<td>The Vital Being</td>
<td>Training of the</td>
<td>Sincerely</td>
<td>• Attitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aesthetic Personality</td>
<td>Determination</td>
<td>Scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploring Materials</td>
<td>Love &amp; Sympathy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3.</td>
<td>The Psychic Being</td>
<td>Integral Yoga (Activity)</td>
<td>Will Power Positive Attitude Self Awareness</td>
<td>Observation Schedule • Attitude scale</td>
</tr>
<tr>
<td>4.</td>
<td>The Mental Being</td>
<td>Cooperative Learning</td>
<td>Learning Achievement Creativity: Concentration</td>
<td>Achievement Test • Attitude Scale</td>
</tr>
<tr>
<td>5.</td>
<td>The Spiritual Being</td>
<td>Meditation Exampler Materials</td>
<td>Self realisation Honesty</td>
<td>Observation Schedule • Attitude Scale</td>
</tr>
<tr>
<td>B</td>
<td>Sri Aurobindo's Philosophy of Education</td>
<td>Concepts, Objective Methods of Teaching Teacher, Discipline etc.</td>
<td></td>
<td>Content Analysis.</td>
</tr>
</tbody>
</table>

- **Data Processing (Statistical Techniques)**

The data was collected through different Research tools and techniques as listed above. The data was analysed in the left of objectives of the study both qualitative as well quantitatively through the use of software on computer. The qualitative analysis of this data was noted. Appropriate statistical techniques were applied to analysis the quantitative data.

**Delimitation of the Study**

1. The study was confined to west zone of the national capital territory of Delhi.

2. The study was delimited to the Public, Delhi administration schools & Kendriya Vidyalaya School (KVS).

3. The study was confined to the class 9th students and teachers of above mentioned type of schools.
4. The study was confined to science students.

5. The study was restricted to the students and teachers of the urban region.

**Major Findings**

On the basis of the strength of analysis and results, the investigator is in the stage to draw the findings. The present chapter has focused mainly on four aspects such as major findings, conclusions, recommendations & limitations and suggestions for further researches. These have been presented below in the same sequence.

The major findings of the study were:

1. The educational ideas and ideals of Sri Aurobindo were the outcome of the emerging period of renaissance in India.

2. The concept of integral education aimed at all-round development of personality and realization of self through the development of physical, vital, mental psychic and spiritual faculties.

3. The psychological and sociological basis of Aurobindo's scheme of education were integral because he envisaged all-round development of personality and at the same time give equal importance to the individual, to the community and to humanity. His scheme of education found no conflict in individual, national and universal aims and principles.

4. Physical education, according to him, was to be based on Yogic exercises.

5. In the integral scheme of education neither the educator nor the educand was solely important rather both were unified in common bond. According to him teacher was helper and the guide of the child. The education, he advocated
provided full freedom to the individual growth of the educand. His free progress system was based on subject evaluation by the teacher.

6. His philosophy of education was a happy synthesis of idealism, spiritualism, naturalism, realism, individualism and socialism.

7. According to him, an accelerated evaluation from man to supra-mental being was through the practice of integral yoga and evaluation of super mind.

8. The system had not started supramental education, but it had modest achievements in the area of psychic and spiritual education and significant achievements in the physical, vital and mental areas.

9. Introduction of integral development as well as integral yoga in education was one of the most important contributions of Sri Aurobindo to the theory and practice.

10. According to him, the psychic development of the individual was based as physical, vital and mental development.

11. His educational psychology was humanistic in nature. Sri Aurobindo had designed the future development of human society and through about integrated education for all round development of the society, which was the basic philosophy of humanism.

12. As an educationist, Sri Aurobindo continued the traditions of Vivekananda and Tagore. He advocated integral education.

13. Education, according to him should not be content with the provision of sole able competence but most also instill a self-confidence that will train students to improvise the necessary skills to meet the challenges of an unknown future.
14. There was a positive attitude of learners towards Sri Aurobindo’s integral Education system.

15. There are significant different between the control group and experimental group on the various aspects of Sri Aurobindo’s Integral Education System.

16. There was a significant relationship among the different aspects of Sri Aurobindo’s integral Education system.

17. The teachers had positive attitude towards Sri Aurobindo integral education system.

18. An analysis of interactions encountered during participant observation throws light on informal lines of communication between the teachers and students, ‘power’ or ‘control’ does not lie with the teacher and negotiations help to maximize students effort. The school provides opportunities for enriching the student’s sense of commitment self-reflection and evaluation which is a step towards maintaining a good working relationship.

19. The ideological goals of Mirambika purport child centered view of providing education which serves as a precondition for espousing work as suitable method of teaching and learning.

20. Teacher’s role is more of a facilitator, a generalist than a specialist. Teaching style can be labeled as informal participative and democratic.

21. The school however, is constantly striving to maintain a balance between its two goals; transcendental and operative in terms of values, aims and believes through its various pedagogic, processes and co-curricular activities.
The findings suggested that, if the academics wanted to serve the ideas of regular effective study and integration of the individual, the nation and the world, they should employ the free progress system.

The Conclusion

Sri Aurobindo’s Integral education gives complete description of education system and also the consciousness structure of the human being. Basing itself on this process the free progress system is developing its form of organization. The system has really geared itself towards achieving goals of evolutionary development of learner. Its achievements so far are enough to certify that this philosophical, experimental and case study approach in education is proving a great success. It is concluded that the integral education system is an unprecedented experiment in education in the educational history of the country and also the experiment is not ended.

Like the researcher, the teachers and learners also believe that the integral education system has achieved the considerable success, in the areas of physical, vital and mental education, but as to it success in the psychic and spiritual education, it is premature to pronounce any opinion. They also like, the researches believe that the Sri Aurobindo’s education philosophy as it stands now does not attend to the supramental education. When compared with the system of education in India, the free progress/integral education system is grand success as far as the mental knowledge of the learners concerned.

Tanmay, who was chief person –in-charge of the pilot experiment of the free progress system, pronounced a similar observation on the system’s achievement in the area of mental education. But, he also added that they might reach the goal within two three years.
They feel that there is under achievement in the area of mental education. Put it must be born in mind that there judgment concerns the aspects of physical organization of the free progress system, has good achievements in the area of mental education.

It needs still better methods and techniques of teaching and learning that implement and promote the ideal and practice of self learning to the students, so as to work out fully in the free progress and integral education system the principle, "......nothing can be taught". The teacher is not an instructor or task Master, he is facilitator and a guide. His business is to suggest and not to impose (Sri Aurobindo & the Mother, 1973).

A Bible story relates that man do not put new wine in old bottles because the aging process will burst the bottles. Instead new wine is placed in new bottle to preserve the wine. There is little doubt that Sri Aurobindo’s Integral Education System new bottles, a new delivery system. The question remains, however, “are Aurobindo’s Integral Education System old wine in new packaging?” Have teachers, policy makers, administrators, national curriculum planners and decision makers taken an academic concept that garnered limited acceptance in the past, wrapped it in the glitzy attire of this approach, and presented it as the pedagogical discovery of the century?

**Recommendations and Limitations**

The following recommendations and limitations are offered in regard to this study.

1. The study administered treatments to the experimental group for six months activities. As a result, the treatment may be satisfactory to direct a significant effect on the dependent variables. If the treatments had been administered for a longer period, the results could have been different from
the ones derived in this study. This implies future studies need to be conducted by administrating the treatments for a longer period, even though it is not easy to produce the treatment for a multiple sessions. Further studies need to control this confounded aspect in order to yield more valid and authentic results. Smaller group discussion might not be beneficial to those students who tend to be quite by nature and feel less responsibility for cooperative responsibility. Consequently the instructor needs to arrange moderators who will encourage a more frequent interaction among those students and then a special training for an active group participation in problem based instruction.

(2) This study also has a limitation in generalizing the findings to all of the Delhi school students measuring in science at this large school system (Delhi Administration, Kendriya Vidyalaya and Public School), because the sample is drawn only from those school systems. In other words, this study has a threat to external validity. However, this threat to external validity could be offset in that. This study is an impact study primarily concerned with finding evidence of causal relationship rather than providing the transferability of an effect to other locations.

Suggestions for further researches

Sri Aurobindo writings on the integral education, their various talks and conversation, to numerous disciples and the phenomenon of the evolving Free Progress System of Education are very wide and profound fields of knowledge from which the learner intellect can harvest different types of crops of educational and psychological researches of theoretical as well as applied mature. Some of the areas of researchers that occurred to the researcher’s mind, during his pursuit of present study, are presented below.
1. The inner consciousness of the human being and the educational methods and techniques of developing subtle senses.

2. The educational principles of the free progress systems of education according to the teachers.

3. A comparative study of psychological foundations of Gurukul system of education of Arya Samaj and those of the free progress system of education.

4. Study of the nature and functions of the mental-physical, the physical-mental, the mental-vital, the vital mental and the physical – vital of the human being.

5. A comparative study of the concept of environment of the western scientific psychology and that of integral psychology.

6. A critical study of the problems of free progress systems of education. A survey of the experiences of the teachers of the S.A.I.C.E.

7. A critical study of the study of the items of physical exercise and programme invented by the Department of Physical education of Sri Aurobindo Ashram.

8. A critical study of the organization of artistic studies and programmed in the progress system of education and its role in education of the vital being.

9. A critical study of special techniques and teaching aids developed by the teachers of the S.A.I.C.E for developing different capacities of the mind.

10. A critical analysis of “Free Progress System” in Higher Education Courses.