CHAPTERS - 2

REVIEW OF RELATED LITERATURE

2.0 Preface
Importance of Related Literature

2.2 Review of related theoretical material
Commission report

2.2.2 Examination Reform plan of action and guidelines for continuous internal Evaluation by U.G.C.

2.2.3 Seminar recommendations

2.2.4 Educators' opinions published in different magazines/journal regarding Continuous Evaluation:

2.3 Abstracts of the previous research

2.4 Salient features of the present study
CHAPTER-2
REVIEW OF RELATED LITERATURE

2.0 Preface

The researcher takes help of previous research review to develop his research design. There is so much research literature published in different fields these days. Plenty of researches are conducted. Different experts publish their theoretical articles in different magazines and journals. Any researcher can make his thesis available for the world using technology of internet nowadays. But the scholars have given two observations regarding this.

2. There is simply too much information around people to keep up to date.

3. On the top of this high quality information is not easy to find.

The solution of this problem is review. Review means to combine results and findings of more than two studies. But sometimes there is biased selection of research which makes it a biased review. Therefore a researcher should be clear about the concept of real review of literature. Following are some of the opinions of the experts about research review.

"Review of related literature consists of identifying related research documents, source determination and analysis in a well planned manner."

-Gay & Airasian (2000)\\(^1\)

"Literature of any field is the basis of the field. The future work is based on it. Therefore, if we do not review previous literature, the work might be ineffective, unimportant and repetition."

-Parasnathray (1981)\\(^2\)

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"All the humanities sciences can be found in books and library. Other living beings give birth to new generations. On the other hand human beings store their knowledge and experiences and thereby add something to the existing knowledge and develop the corresponding fields."

- John W. Best (1959)³

Sharma (1985)⁴ indicated some of the implications of research review:

- It gives direction to the researcher.
- It helps develop research design.
- It gives knowledge about the work done in the field.
- Different hypotheses can be formulated based on the research review.
- Different data collection tools and analysis method can be selected.
- It enriches the researcher and his work.
- It guides to adopt required statistical techniques.

In short, the review of related literature enriches the researcher and thus crystallized his perspectives of conducting research.

2.1 Importance of Related Literature

Walter R. Borg and Gall⁵ indicated by showing importance of related research review and said "the related research in any field forms the foundation upon which all future works will be built."

Thus, review of related research is very important for the researcher. Following reasons can be presented to show its importance and appropriateness.

• Review of related literature gives deep knowledge to researcher.
• Review of related literature plays very important part in any research.
• Review of related literature shows clear perspective of research to the researcher.
• Review of related literature shows the steps of research to be followed in conducting the research in a scientific way.
• Review of related literature directs the researcher in selecting proper research method and proper tools for data collection.
• Review of related literature imparts deep insight into research.
• Review of related literature is helpful in data analysis, findings and its interpretation.
• Review of related literature takes back to previous researches and builds the background for the new research.
• Review of related literature stops the repetitions of the research.

Review of related literature is very useful in understanding the background of research. It develops the research perspective of the researcher. B. W. Tackman⁶ indicates the importance of Review of related literature by saying:

1. It indicates the appropriateness and importance of the related study.
2. It may help in discovering new variables related to the research.
3. It clarifies the special features, limitations and other aspects of the research on hand.
4. It shows the useful tools and their significance.
5. It gives new directions.

G. J. Moole\(^7\) indicates the importance of Review of related literature: "The review of the literature promotes the greater understanding of the problem and its crucial aspect and resumes the avoidance of unnecessary duplication. It also provides comparative data on the basis of which to evaluate and interpret the significance of one's findings."

J. C. Agraval\(^8\) says "The published related research shows new ways of solution to the research problem. It gives understanding of hypotheses, statement of the research problem, and background of the research problem and review of related literature."

Thus, the review of related literature gives information about the variables of the research, hypotheses, data collection sources, tools for data collection and outline of research process.

2.2 **Review of related theoretical material**

Evaluation has very importance place in education. Therefore there has been much published material such as articles, issues and other books. There have been many seminars, symposia, conferences and workshops related to evaluation. There have been some of the reports published after such programs. Important details are presented here.

2.2.1 **Commission report**

"The education commission" appointed in 1948 was for the review of the effectiveness of the current education system. The commission indicated that the only change to be done in the university education is to change its examination system.

\(^7\) G. J. Moole: *The science of educational research*, Uresbia pub. House, ew Delhi, p.12.

The secondary education commission (1952) recommended some of the important things. The current exams instead of following curriculum, dictate the curriculum. They hinder experimentation. It also creates hurdle for proper teaching and presentation of the subject in a proper way. It stops progress. It fosters monotonous rigidity instead of creativity. The examination system forces the students to concentrate on the limited area of study. This develops the wrong values among the students. Students start to believe the success in examination a success in education. Thus in short this mars the real objective of education.

Thus the above two commissions gave importance to the examination system. The education commission stresses the importance of units and change to be elicited.

2.2.2 Examination Reform plan of action and guidelines for continuous internal Evaluation by U.G.C.

U.G.C. has played very important role in changes of Examination system at university level. U.G.C. has sponsored the universities that wanted to open examinations reforms departments. U.G.C. also gives grants to the universities for Examination reforms. The examination reforms plan of action (1973) by U.G.C. said that examination is very important part of education. The external examinations foster cramming. There are many nuances in the examination system such as copying, paper leaking. The examinations have very low reliability and appropriateness. This examination system has damn affected the quality of education and need immediate changes. U.G.C. has recommended internal evaluation, grading system, question bank and other improvement oriented programs. It has been expected that different universities implement all these measures. Examination improvement steps can be summarized as follows:
(5) Continuous and comprehensive Evaluation before the annual examination.
(6) Questions banks should be developed to improve the quality of question papers and remove the mistakes in the papers.
(7) Grading system should be implemented to increase the quality of education. It may help compare different subjects.
(8) Semester system should be implemented for more stability.

Moreover, internal evaluation should not taken as one of the tools to increase marks but making education more thorough and comprehensive by checking those skills which cannot be tested by writing only.

2.2.3 Seminar recommendations

The seminar organized in South Gujarat University-Surat recommended that the internal evaluation of the students should be done by the teachers as and when needed during the year of study. He should take test in the class after telling about the test or accidentally.

3. A book on continuous and comprehensive evaluation by Secondary education board. Continuous and comprehensive evaluation and development department of Gujarat Secondary Education board, Mr. PravinsinhChavda, the secretory, published a book titled "Comprehensive and continuous evaluation". The following were some of the highlights:

- Three terminologies: evaluation, comprehensive evaluation and continuous evaluation. This makes the complete word continuous and comprehensive evaluation. All the three terms are related to preparing a complete report for each student about his overall development.
• Evaluation in education indicates reliable and valid data collection about the students' achievement and reporting in a meaningful manner.

• Comprehensive evaluation not only indicate academic achievement but also physical fitness of the student, character, interest, attitudes etc. continuous evaluation indicates repeatedly evaluation in teaching learning process. After teaching of each unit there should be subsequent evaluation. Thus diagnosis and remedial work will go parallel with teaching. Practice, re-evaluation and then teaching of the next unit this is continuous evaluation. Following different designs were recommended.

❖ Design: 1

Following are the characteristics of the design:

(1) Every subject should be divided into eight units. Total eight unit tests of 20 marks should be taken for each unit. Thus total being 160 marks of testing.

(2) The timetable should be like two subject tests in each week from the third week of July.

(3) There should be a project for each subject which should be submitted at the end of the year having 20 marks. The project may include assignment, home works, answer key of the question paper, charts, journal, observation notes, models etc.

(4) Each subject will have 20 marks oral test or experiment based test.

(5) If there is need of 100 marks test it should be included in the planning. 300 marks should be enough for promotion to the next class.

(6) If any student is absent or fails, a 20 marks re-test can be taken. This can be planned weekly, monthly or annually. The re-test score
and the real test score should be compared and the higher one should be considered for the promotion.

❁ **Design:**

Following are the characteristics of the design:

(1) There should be 20 marks three unit tests, 50 marks first semester test, and 60 marks annual test. Thus making it total five tests.

(2) There should be total 2 unit tests for each subject and can be taken at determined times.

(3) There should be a 50 marks test at the end of the first semester.

(4) There should be a 20 marks unit test in the second semester.

(5) There should be a 60 marks annual test.

(6) There should be a 20 marks project and 20 marks oral or experiment based test as indicated in the first design.

(7) The student getting 40 marks out of these 200 marks should be declared passed.

(8) If any student is absent or fails, a 20 marks re-test can be taken. This can be planned weekly, monthly or annually. The re-test score and the real test score should be compared and the higher one should be considered for the promotion.

(9) Each subject should be divided into five units and following is the marking scheme:

(A) First unit test-unit-1-20 marks

(B) Second unit test-unit-2-20 marks

First semester unit test-unit-1-10 marks

Unit-2-10 marks and

Unit3-20 marks

Thus total 40 marks.

(C) Third unit test-unit-3-20 marks

(D) Annual unit test-unit-5-20 marks
Unit 1 to 4 total 10 for each making 40 marks and unit 5 having 20 marks thus grand total being 60.

**Design:** 3

Following are the characteristics of the design:
(1) Every subject should be divided into five units.
(2) Five unit tests of 25 marks should be taken for each unit. There should be annual planning of unit tests.
(3) There should be 50 marks annual test. All the five units should be covered. Thus there are total 5 unit test and one annual test to be taken. Five tests carrying 125 marks and one annual test carrying 50 marks total being 175 marks.
(4) There should be a project for each subject which should be submitted at the end of the year having 10 marks. Each subject will 15 marks oral test or experiment based test.
(5) The student getting 40% marks out of these 200 marks should be declared passed.
(6) If any student is absent or fails, a re-test can be taken. This can be planned weekly, monthly or annually. The re-test score and the real test score should be compared and the higher one should be considered for the promotion as indicated in design 1 and 2.

**Design:** 4

Following are the characteristics of the design:
(1) Every subject should be divided into five units.
(2) Five unit tests of respectively 20, 30, 40, 50 and 60 marks should be taken.
(3) There should be a first test from the first unit and then subsequently preparing test papers for the next units by taking 50% content from the previous unit and 50% content from the current unit. Thus it will have total 200 marks.
(4) Project work will have 20 marks. The oral and experiment tests will have 40 marks of internal evaluation.

(5) The student should get 80 marks out of this 200 marks and he has to get separately passed from the oral as well as project work.

(6) If any student is absent or fails, a re-test of 80 marks can be taken. This can be planned weekly, monthly or annually. The re-test will be based on the whole syllabus. The student should get 40 marks out of 100 for passing.

❖ **Design:**

Following are the characteristics of the design:

(1) Every subject should be divided into five units.

(2) Five unit tests of respectively 20, 30, 40, 50 and 60 marks should be taken. Total being 180 marks.

(3) Following is the weightage of marks according the units.
<table>
<thead>
<tr>
<th>Unit test</th>
<th>Curriculum</th>
<th>Marks</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>First unit</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>First unit and Second unit</td>
<td>40</td>
<td>First unit 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Second unit 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total 40</td>
</tr>
<tr>
<td>3.</td>
<td>Third unit</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Forth unit and third unit</td>
<td>40</td>
<td>First unit 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Second unit 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total 40</td>
</tr>
<tr>
<td>5.</td>
<td>Fifth unit and first to forth unit</td>
<td>60</td>
<td>first to forth unit 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fifth unit 36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total 60</td>
</tr>
</tbody>
</table>

(4) Project work will have 10 marks. The oral and experiment tests will have 10 marks of internal evaluation total being 20 marks. The student getting 40% marks out of these 200 marks should be declared passed.

(5) The student should get 80 marks out of this 200 marks and he has to get separately passed from the oral as well as project work.

(6) If any student is absent or fails, a re-test of 80 marks can be taken with 20 marks of internal evaluation will also be considered. Total being 100 marks. The student should get 40 marks out of 100 for passing.
The schools following the Continuous and comprehensive evaluation should have following preparations.

(1) The schools principals and teachers should discuss the designs and select a design suitable for them.

(2) The units should be divided and thus the curriculum should be divided into units.

(3) They should prepare learning objectives for each unit.

(4) The traditional method of teaching based units should be given to students for self-learning. There should be revision and they should be guided as and when needed. The teaching should incorporate different activity based lesson plans, educational aids, social incidences, news papers, magazines etc.

(5) Project work should be planned at the beginning of the year. The students should be informed with the work plan for them throughout the year about the project.

(6) The parents should be informed about the Continuous and comprehensive evaluation in the beginning of the year. One general letter should be issued and a parents meeting should be held. All the parents should get signed in the letter as well as in the progress report about the consent of the program.

(7) All the students should be guided well before the year about the plan and continuously should be guided throughout the year. Students should be made aware that they should be present in all the unit tests.

(8) Students should be informed about the whole program well in advance.

(9) Oral tests and practical tests should be planned and taken accordingly.
(10) They should organize district level training courses and workshops on continuous and comprehensive evaluation with the coordination of education department, other primary schools, district teachers' associations, district education officers. All the teachers, principals should meet from time to time to discuss the success of the program and share their problems to find new solutions.

4. Educators' opinions published in different magazines/journal regarding Continuous Evaluation

2.2.4 Educators' opinions published in different magazines/journal regarding Continuous Evaluation:

2. Nanubhai D. Patel said in reference to Continuous Evaluation that "Education is a continuous process. The education is affected by children, relatives, teacher, social atmosphere; environment and thus each and every living thing have direct or indirect effect. Therefore it is said that man is the product of his environment. Therefore these effects should be noted.

Diversity and development, qualitative change, external change or complete development is continuous process. It is micro as well as macro. Though these processes are different they go parallel in the life of an individual and affects whole life. It is certain, regular and sequential. They are correlated. Therefore continuous evaluation should be done.

Moreover, continuous evaluation may help solve the problems of stagnation, wastage, spreading, forgetting, fear, and misunderstanding. It can develop the punctuality, zeal, seriousness, honesty, continuous learning etc. therefore diagnosis and remedial work should be arranged.
(2) Shri Vinodbhaipatel indicates that evaluation should be continuous and should be at times. Continuous evaluation is a continuous process, continuous guidance, continuous individual guidance, continuous diagnosis and remedial work. If students remain irregular, disinterested and performs well in annual exams by cramming the content should not be considered the knower of the subject. This is an unexpected result. But continuous evaluation gives:

1. Student weakness
2. Student strength

It gives regular report of the progress of the student. It is useful in diagnosis and remedial work.

Continuous evaluation is stressed in national education policy. Examination should be made internal part of education system. Our schools neglect the evaluation of effect of education, better educational growth and just concentrate on categorization, standardization according to the level of the students. Therefore the whole educational system has become examination centered. To change this system and make our society value oriented, the only option is to accept continuous evaluation. What should be the first step? It should be started at the primary level. P.T.C. colleges prepare primary teachers therefore they should be explained this new concept so that it can be applied in primary education effectively.

The academic aspect should be given 50% weightage and his talent related skills should be given 50% weightage. The students' unit related achievement should be tested using unit tests and thus unit approach should be followed. What is unit
approach? Unit is a small part of the content which can easily be understood by the students. Unit size might be small or big.

6. The content should be small, proportionate and should have a small test.

7. The teacher should take a small period of 30 to 40 minutes without any disturbances.

8. Each unit test could be of 10 to 20 marks.

9. Objectives should be selected by the teacher.

10. The teacher may select the type of question but the objective, short answer type questions should be preferred.

(3) Joitabhai C. Patel said that the evaluation done of the students should be continuous.

Continuity means innovation, change, order, and absence of rigidity in the evaluation process.

Continuous evaluation is the basis of progressive development. If you observe the students' development continuously the students' development may go in right direction. Some of them may be slow some of them might be fast. But all the students are trying their best is the achievement of the continuous evaluation.

The centre of continuous evaluation is children. They should be introduced with the cognitive aspect. This makes continuous evaluation easier. It may create situations for continuous evaluation. The students may get involved with their abilities, interest, attitudes etc. They will be trying to achieve more. Because all children are following the process.

In short, continuous evaluation process makes the students self-confident to take decisions. It makes student analyse, self-practice. Continuous evaluation makes this possible. Ex. If you want to teach student arrange. Know how much does he know about arrangement. Re-teach and re-evaluate. This will make him learn the skill of arrangement.
Its not only evaluating the students but also re-teaching should be there to be followed. Thus evaluation is a type of diagnosis. Therefore remedial work is the natural process after diagnosis. If a doctor diagnose an illness there is no benefit for the patient. It's the remedial work that is beneficial for the patient. Thus evaluation is in the same way the process that is applied for the development. Re-teaching and re-evaluation is related to evaluation process. Thus re-teaching and re-evaluation is interwoven parts of continuous and comprehensive evaluation. An evaluator has to accept this fact.

(5) Haribhai Patel in his article on evaluation noted about important points about continuous and comprehensive evaluation. Evaluation in education is the process of measuring the academic achievement and reporting in a meaningful way.

Learning should be evaluated continuously. Evaluation has been accepted as an internal part of teaching-learning process as it is necessary in giving required feedback and follow up work. It provides more opportunities for the improvement in the defects of the students and then taking measures of remedial work and thus provides more opportunities for learning.

If the learning is evaluated continuously throughout the year it helps make study more regular. It strengthens the expected, individual and social characteristics. It moulds the proper attitudes among the students. Continuous and comprehensive evaluation motivates the over all and completes development of the students.

1. Preparing a complete list of the learning objectives for each learning aspect.
2. Planning the curricular and co-curricular activities very carefully.
3. Applying evaluation as a tool of feedback in the whole teaching process.
Following are the points to be remembered while developing effective evaluation program:

1. Establishing expected educational objectives.
2. Creating appropriate conditions for the expected evaluation.
3. Selecting appropriate tools and techniques for collecting the proof documents and using them appropriately.
4. Evaluating and interpreting the noted documents.
5. Giving feedback for the teaching and learning process improvement.

2.3 Abstracts of the previous research

It is necessary to study the research carried out earlier to clarify the objectives, outline, method, and limitation etc. of the research. Such kind of study helps the researcher as a basis to the research. The researcher, who is well aware with the research carried out in the past, can carry out his research in the specific manner.

The researcher has reviewed of literature along with the present study which is given below:

(1) **Title: "A study of continuous internal evaluation and semester examination marks"**


*Objectives of the study:*

1. To study the co-relation between the continuous internal evaluation and semester examination marks.
2. To compare the continuous internal evaluation and semester examination marks.
The study was conducted in reference to a paper of history, economics, and philosophy, chemistry, botany and commerce subjects.

**Analysis method:**
The data analysis was done using the descriptive statistical techniques and the product moment ratio. Following details were obtained.

- To compare the continuous internal evaluation and semester examination marks.
- To compare the marks of one paper with the marks in the university papers.
- Categorizing according to gender and subject wise.

**Findings:**

(1) There was notable difference in the marks given by the college in reference to the maximum, average and minimum marks.

(2) There was notable variation in the maximum, average and minimum marks given by the university in reference to college.

(3) There was low difference between the brilliant and dull students in reference to the internal evaluation marks. However, there was difference in the university marks.

(4) Neglecting some of the exceptions, the difference between the internal evaluation marks and the university marks was significant and there was good relation between them.

(5) There were more percentage of students getting passed or higher grades in the semester system exam compared to the non-semester exam system. Most of the students achieved first or second class in the semester system.
(2) **Title:** "An evaluative study of the semester system in the selected universities of India."

**Researcher:** Akhtar P. R. (1980), M. S. University, Baroda.

**Objectives of the study:**
1. To know the objective behind the semester system.
2. Flexibility in curriculum development
3. Academic autonomy given to the teachers in reference to using teaching learning methods.
4. Evaluation
5. Opinions regarding the educational change and study habits from the students and the teachers.
6. Problems faced by students and teachers
7. Attitudes of the students and teachers towards semester system

**Analysis method:**
The data analysis was done using the following three methods:
1. Calculating correlation using ordinal correlation method
2. Comparing using t-test
3. Finding the percentages of the opinions.

**Tool of the study:**
- The researcher constructed two questionnaires. The students and teachers were to give responses in those questionnaires.
- An attitude scale was used to know the attitudes of the students and teachers.

**Sample:**
Total ten universities from India were selected in the sample. The sampling technique was accidental sampling. There were total 583 students and 363 teachers.
Findings:

1. The university authorities introduced the semester system consulting the experts. Teachers' opinions were also considered in taking the decision.

2. The semester system was introduced for the continuous and comprehensive evaluation of the students. There was enough autonomy in developing the textbooks, helping the weak and brilliant students.

3. The teachers opined that they felt free in developing the curriculum.

4. Most of the teachers had the opinion that most of the students opted for the semester system. They felt their workload was divided. The continuous and comprehensive evaluation gave them the opportunity to improve their grade.

5. The semester system kept the students active. However, the opinions of the students and the teachers were divided.

6. About 30% teachers and 50% students did not opt for the semester system and others chose the semester system.

7. Most of the teachers believed that they did not feel free in applying alternative teaching methods. However, the lecture method ruled.

8. 60% to 65% students believed that as the teachers were using lectures, discussion, group teaching, programmed learning, quiz and field works and therefore the method was satisfactory.

9. Total 9 out of 10 universities used continuous and comprehensive evaluation method for the evaluation of the students. There was improvement in the internal marks as well as external examination marks.

10. Internal evaluation raised the affective side in teaching learning process. And it also motivated the innovations in lecture method.
11. Students were allotting more time for study.
12. Some of the teacher community felt problems for some reasons. The problems were of insufficient time for teaching, administrative work load increase, assignment testing work load and the leaves.

(3) **Title:** "A study of effect of continuous evaluation on learning in schools"


**Objectives of the study:**
1. To construct total nine tests covering the science and math's subject whole syllabus of the fifth standard in the south Delhi public schools and KendriyaVidyalayas.
2. To standardize the Bloom taxonomy based tests covering whole syllabus of science and mathematics subject.
3. To compare the achievement scores in reference to gender, age and sequence of birth.
4. To compare the achievement scores between the experimental and controlled groups in reference to the school environment and the classroom environment.
5. To compare the achievement scores in reference to the parental education, occupation and income.
6. To compare the achievement scores in reference to likings and disliking towards the subject and the subject teachers and the number of children in the family.

**Data analysis method:**
T-test, f-test and factor analysis were done in the data analysis in the present study.

**Research tool:**
The tools in the study were the Bloom taxonomy based tests constructed by the researcher following the scientific procedure.

Observation:
The study was related to the evaluation work done in the science and math's subject whole syllabus of the fifth standard in the south Delhi public schools and KendriyaVidyalayas.

Findings:
1. The reliability of the mathematics and science tests were known.
2. There was positive effect of the continuous tests in the normal condition of the schools.
3. The result was known in reference to the cognitive domain objectives in the form of the six components in reference to all the variables and the groups.

(4) Title: "A study of effect of continuous evaluation"


Objectives of the study:
1. To develop continuous and comprehensive evaluation program.
2. To construct achievement tests for the Gujarati and Mathematics subjects in the standard-7 and standard-9.
3. To construct an inventory for measuring the examination anxiety.
4. To investigate the effect of continuous and comprehensive evaluation program on the academic achievement of the students.
5. To investigate the effect of continuous and comprehensive evaluation program on the examination anxiety of the students.
6. To investigate the effect of continuous and comprehensive evaluation program on the opinions about the subjects.
**Hypotheses:**
The researcher constructed research hypotheses initially and then null hypotheses for easier analysis keeping in mind the objectives of the study.

**Research tool:**
Following were the tools used in the study.

1. Achievement tests: total 4 achievement tests were constructed for the Gujarati and Mathematics subjects in the standard-7 and standard-9 for the selected units.

2. Inventory: an inventory was constructed to know the examination anxiety of the students.

**Findings:**

1. The academic achievement of the boys and girls students of standard-7 and standard-9 taught using the continuous evaluation method was higher as compared to the lecture method.

2. The examination anxiety of the boy students of standard-7 taught Gujarati subject using the continuous evaluation method was lower as compared to the lecture method.

3. The examination anxiety of the girl students of standard-7 taught Gujarati subject using the continuous evaluation method was almost the same as compared to the lecture method.

4. The examination anxiety of the boy and girl students of standard-7 taught mathematics subject using the continuous evaluation method was almost the same as compared to the lecture method.
5. The examination anxiety of the boy and girl students of standard-9 taught Gujarati subject using the continuous evaluation method was almost the same as compared to the lecture method.

6. The examination anxiety of the boy and girl students of standard-9 taught Mathematics subject using the continuous evaluation method was lower as compared to the lecture method.

7. The attitude of the boy and girl students towards Gujarati subject taught Gujarati subject using the continuous evaluation method was almost the same as compared to the lecture method.

8. The attitude of the boy and girl students towards mathematics subject taught Mathematics subject using the continuous evaluation method was almost the same as compared to the lecture method.

9. The attitude of the girl students of standard-7 towards mathematics subject taught Gujarati subject using the continuous evaluation method was almost the same as compared to the lecture method.

10. The attitude of the boy students of standard-9 towards Gujarati subject taught Gujarati subject using the continuous evaluation method was higher as compared to the lecture method.

11. The attitude of the girl students of standard-9 towards Gujarati subject taught mathematics subject using the continuous evaluation method was higher as compared to the lecture method.

12. The attitude of the boy students of standard-9 towards Mathematics subject taught mathematics subject using the
continuous evaluation method was higher as compared to the
lecture method.
13. The attitude of the girl students of standard-9 towards
mathematics subject taught mathematics subject using the
continuous evaluation method was higher as compared to the
lecture method.
14. There was no effect of standard, study subject and gender on
the correlation between teaching method and academic
achievement.
15. There was effect of standard, study subject and gender on the
correlation between teaching method and examination anxiety.
16. There was no effect of standard, study subject and gender on
the correlation between teaching method and attitude towards
the subject.

(5) **Title: "A study of effect of continuous evaluation in reference to
economics subject of standard-9"**

**Researcher:** Joshi V. M. (2000) Saurashtra University, Rajkot.

**Objectives of the study:**
1. To develop continuous and comprehensive evaluation program.
2. To construct achievement tests for the economics part of social
science subject in the standard-9.
3. To construct an inventory for measuring the economics confidence.
4. To construct an attitude scale to measure the attitude towards the
economics subject.
5. To investigate the effect of continuous and comprehensive
evaluation program on the academic achievement of the students.
6. To investigate the effect of continuous and comprehensive
evaluation program on the attitude towards the economics subject.
7. To investigate the effect of continuous and comprehensive evaluation program on the economics subject of standard ninth.

_Hypotheses:
_The researcher constructed research hypotheses initially and then null hypotheses for easier analysis keeping in mind the objectives of the study._

_Research tool:_
Following were the tools used in the study.

1. Achievement tests were constructed for the economics subject to measure the academic achievement in the economics subject.
2. An inventory was constructed to know confidence of the students in economics namely "About economics"
3. The achievement tests were used for Economics standard.

_Limitations of the study:_

1. Only teacher made tests were used for the measurement of the academic achievement in the economics subject of standard-9. This means criterion referenced tests or standardized tests were not used.
2. The schools were not selected randomly from the Rajkot city for the sample. Only purposive sampling technique was used for the facilitation of the experiment and the research.

_Findings:_

1. The continuous evaluation method was more effective as compared to the lecture method in reference to economics subject academic achievement. This means teaching method had effect on the academic achievement. But there was no
effect of gender on the correlation between the academic achievement and the teaching method.

2. The results indicate that the continuous evaluation method was more effective as compared to the lecture method in reference to economics subject related boys and girls students of standard-9. The teaching with continuous evaluation method has increased the confidence about economics among the students if used in place of lecture method. But there was no effect of gender on the correlation between the teaching method and the confidence in the subject.

3. The results indicate that the continuous evaluation method had same effect as compared to the lecture method in reference to the attitude towards economics subject of boys students of standard-9. The lecture method was more effective in reference to the attitude towards economics subject of girls students of standard-9. Thus there was difference in the results about the effect of teaching method on the attitude towards economics subject. In short, there was effect of gender on the correlation between the teaching method and the attitude towards economics the subject.

4. The results of the experiment on the boys indicate that the continuous evaluation method had more effect as compared to the lecture method in reference to the retention of the economics subject in boys' students of standard-9. The lecture method and the continuous evaluation method had the same effect in reference to the retention of economics subject in girls' students of standard-9. Thus both the results indicate that the continuous evaluation method can increase the retention of
the students. Therefore on should use continuous evaluation method in teaching process.

(6) **Title:** "A study of effect of continuous evaluation in reference to commerce subject at higher secondary learning styles level"

**Researcher:** Pandya Archanaben B. (2002) Saurashtra University, Rajkot.

**Objectives of the study:**
1. To develop continuous and comprehensive evaluation program.
2. To construct achievement tests for the Elements of accountancy and Business administration subjects of standard-11 and standard-12.
3. To construct an inventory in reference to commerce subjects.
4. To investigate the effect of continuous and comprehensive evaluation program on the academic achievement of the students.
5. To investigate the effect of continuous and comprehensive evaluation program on the attitude towards the commerce subject.
6. To investigate the effect of continuous and comprehensive evaluation program on the examination anxiety.

**Research tool:**

Following were the tools used in the study.

Total four Achievement tests were constructed for the selected units of Elements of accountancy and Business administration subjects of standard-11 and standard-12 to measure academic achievements of the students. An opinionaire was constructed to know the opinions of the students towards the subject. An inventory was constructed to know examination anxiety of the students.
Data analysis:

T-test was used to know the significance in the deference between the experimental group and controlled group in referece to following variables.

1. Academic achievement in related subjects
2. Examination anxiety
3. Opinions about different subjects

Findings:

Following were the findings based on the results achieved from the experiment.

1. There was notable increase in the academic achievement of the students irrespective of the standard i.e. standrad-11 or standard-12, area i.e. rural or urban because of continuous evaluation method as compared to lecture method.
2. Continuous evaluation method is better compared to lecture method in reference to examination anxiety or have almost the same effect. In fact lecture method was better than continuous evaluation method.
3. Continuous evaluation method is better compared to lecture method in reference to the opinions about the subject or have almost the same effect. In fact lecture method was not better than continuous evaluation method in any way.

(7) Title: "A study of effect of evaluation methods in some of the branches of Baroda"


Objectives of the study:
1. To study the evaluation methods where semester system was implemented.
2. To know the ideas of the teachers about the semester system, internal evaluation and grading system.
3. To know the opinions of the teachers about the semester system, internal evaluation and grading system.

**Research tool:**

Following were the tools used in the study.

1. Questionnaire for the teachers: it was for internal evaluation and about giving grades to students.
2. Questionnaire for students: different questions were formulated based on the evaluation method. Its where semester system has internal evaluation as well.

**Limitations:**

1. The study was limited to semester system adopted faculties only.
2. The opinions of the teachers working under semester system were only obtained. The teachers were from different faculties of Baroda University only.

**Findings:**

1. The lecturers opined that there was appropriate division of the content courses in the semester system. This semester system prompted the course to start as early as possible. They were unable to allot more time to students. Students were regular in attending the class from the beginning.
2. The teachers opted the semester system more that the annual evaluation system.
3. Students were also liked the semester system as they could divide their readings into semesters. They received timely motivation as well.

4. The students opted semester system as they had the opportunity to improve their grades and workload was divided.

5. Some of the students did not like this semester system. As their course was so high they did not find the time to search for references and discussion. They felt themselves continuously busy in the work.

6. The teachers had the opinions that the semester system had good effect on the students. It strengthened the student learning.

(8) *Title: "A survey of factors which influence teachers use of computer based technology"


The main focus was to study the results of the teachers and other details based on the use of computer technology where the use of computers were found useful tool for the classroom.

(9) *Title: "Colour as an instruction all variables"

*Researcher:* Dvayare (1972).

In the present research, some colorful figures were shown to 1054 students of standard 9, 10, 11 and 12 and 5 tests were offered to the students to test the effects of colorful figures on the students.
(10) **Title:** "The effectiveness of a laboratory and multi-media instruction technique as compared to the conventional lecture demonstration method of teaching carburetion to tenth grade students."

**Researcher:** Tailor (1973)

In the present research, the effectiveness of a laboratory and multi-media instruction technique as compared to the conventional lecture demonstration method of teaching carburetion to tenth grade students.

(11) **Buch M. B. (1979) A survey of Research in Education Baroda: Center of Advanced study in education.**

(12) **Title:** "Development of multimedia package for teaching & course on audio visual education"

**Researcher:** Krushnan (1983)

The research was carried out on the development of multimedia package for teaching and course on audio visual education.

(13) **Title:** A study of impact of self instructional material of sex education on adjustment meroticism and attitude towards sex of high school students.


A study of impact of self instructional material of sex education on adjustment meroticism and attitude towards sex of high school students which was carried out on the students of standard 10th and 12th who live in both rural and urban area.
(14) Title: Effectiveness of continuous evaluation in science subject at secondary level.

Researcher: Jani Sanjay (2005)

(15) Title: "A study of drama technique in teaching of literary works of Secondary school Gujarati subject"


In the present study, the effectiveness of students who live in both rural and urban area with reference to dramatization in the teaching of literature.

(16) Title: "A study of construction and effect of the Geometry tools skill development program"


In the present study, the effectiveness of both the forms were proved for the geographical tool proficiency program.

(17) Title: "A study of the effect of the complementary teaching techniques like maths games, programmed learning, self-learning method in reference to the standard-8 maths unit "GanitPrichay"


In the present study, mathematical games as a complimentary method of teaching were found more effective compare to conventional method of teaching with reference to academic achievements.

(18) Title: "Construction and effectiveness of Business administration and management program"

In the present study, the academic achievements of the students taught through corresponding method compare to lecture method were found more significant with reference to the Banking unit of Organization of commerce subject.

(19) **Title:** "Effectiveness of different instructional start strategies for developing vocabulary in Gujarati language"

**Researc**h**er:** Kundal (2005)

In the present study, there was found remarkable increment in the vocabulary of both boys and girls students with reference to the reference based teaching and demonstration based teaching methods.

(20) **Title:** "A study of effect on examination Anxiety of continuous evaluation programme regarding subject of organization of commerce and management of standard 6"

**Researc**h**er:** Mugur (2011) Ph. D. Thesis, Saurashtra University, Rajkot.

In the present study, it was found that the academic achievement was very high of the students of 11 standard for the subject organization of commerce with reference to continuous evaluation method.

(21) **Title:** "A study of the environment education lessons prepared by the technology department of Gujarat"

**Researc**h**er:** Vaishnav (1990) M.Ed. Dissertation, Saurashtra University, Rajkot.
In present study was focused on the methods of teaching through conventional, television lessons and continuous evaluation method. In which, the sample of students from standard 4 were taken. And the effectiveness was found in the students who were taught through continuous evaluation method.

(22) **Title: "Effectiveness of continuous evaluation in Hindi education"**

**Researcher:** Bhimani(2008), Ph.D. Thesis, Saurashtra University, Rajkot.

In the present study, it was found that the effectiveness in teaching Hindi was more significant through continuous evaluation method compare to conventional method where academic achievement was recorded high and exam anxiety was recorded less.

### 2.4 Salient features of the present study

The present research differs from the previous research in following respect:

1. The previous research sample was related to the standard 7, 8, 9, 10, 11 and 12. Where as in the present research, the students of standard-9 and 10 were selected from the changed structure of secondary education.

2. The subjects selected in the previous research were Gujarati from standard-7, mathematics from standard-7, economics, standard-9, business administration and elements of accountancy from standard-11 and standard-12. The present research was on the grammar topic from the Gujarati language of standard-9 and 10.

3. The experimental design selected for the present research was Randomized two groups post-test only design. There were less limitations of the design and many benefits. Therefore, the
experiment could be conducted in a well organized manner, clearly, methodical and specific.

4. The researcher put special efforts in controlling the factors affecting the reliability and validity of the experiment.

5. The present research kept in mind the concept of replication of the experiment. Therefore the experiment was replicated four times results were obtained. This raised the applicability of the results to different population.

Thus, the review of the previous research and its comparison with the present research indicate that the research is quite in-depth and its scope is a bit wider.
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