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A STUDY OF THE CURRENT INSTRUCTIONAL PRACTICES IN THE SCHOOLS OF
VADODARA CITY - A RESEARCH INITIATIVE

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Introduction

Present day education system is becoming very demanding not only for teachers but also for teacher educators. The challenges that we as Educators face is compounded by the explosion of knowledge and the emergence of a multiplicity of learning resources and our efforts to transform traditional paradigms of learning and cater to the demands of this changing context. The changing role of teachers and the changing definitions of teacher effectiveness have been increasingly studied and analyzed, with research undertaken and the outcomes being fed back into the system to facilitate improvement in instructional practices. 'Teachers of today' have to shoulder the responsibility of educating the present generation and to guide them to face the challenges of tomorrow - the coming times! The coming times are going to be more demanding and thus the need to know and understand if the present day teacher is equipped to handle these unprecedented challenges. Thus, the 'teacher of today' needs to keep pace both with current trends and requirements of the future.

The current focus of Researchers, Policy Makers and Practitioners with regard to school teaching is the development of professional competencies, and on the most effective ways of achieving higher levels of commitment and motivation for higher-level performance on the part of teachers. School Education being the preparatory ground for Higher Education, teachers in schools have to effect a transformation from subject-oriented knowledge to general skills; from student mastery of discrete units of knowledge to a more inter-disciplinary approach; from their *getting taught* to *learning to learn*. In order to achieve these, the teacher him/herself should be cognizant of the latest techniques so that the outcomes can be realized and fruitful.

Teaching and learning go hand in hand. Appropriate pedagogical training would benefit every one engaged in the task of teaching and eventually, the learner. Regardless of the level at which one functions – pre-primary, primary, secondary, higher secondary, collegiate and university – some amount of training would undoubtedly increase one's teaching competency. Ultimately what is the teaching-learning process trying to achieve? The answer is: Development

of the learner in intellectual, affective and skill areas for total development of personality through curricular and co-curricular programmes.

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We also need to acknowledge that needs of learners vary with age; Children at the primary level need freedom to play, explore, manipulate and hence education for this level must be predominantly activity-based. High-school teachers need training to handle preadolescent learners. Classroom dynamics differ in both situations.

These concerns were the genesis of this Study. The Researchers were keen to answer the question - How could research be related to the improvement of the present day classrooms? This led to the conducting of the Study i.e. *A study of the current instructional practices in the schools of Vadodara city.* The Objective of the Study was to critically review the ongoing instructional practices in the schools of Vadodara city with a view to utilizing the inputs to enrich the Teacher training program and thereby making it more relevant to the future practitioner.

The Study.....

The Study was conducted during the year 2006-07 in which different schools were visited and the ongoing instructional processes were observed. All schools of Baroda city were considered as our population. The city has around 20 public schools, 100 private schools, 126 Corporation run Primary schools. These schools could further be divided into Public and Private, CBSE and GSEB, Gujarati and English medium, Residential and day schools.

Ten schools comprised the sample. Schools were selected randomly from among the population available in the city. The data collection was done on a continuous period of ten to twelve days. Teachers were interviewed in order to elicit their views regarding new and upcoming methodologies. The classroom instructional processes were also observed in the study. The data needed for the Study was collected from the Secondary section classes and the teachers teaching therein.

Methodology adopted

The study was organized in two phases. In the first phase the two tools were used for data collection, namely Teacher Interview and Teacher Observation Schedule.

Teacher Interview Schedule contained a set of nineteen questions which focused on finding out the innovative practices adopted by the teachers for effective teaching. The questions were so

designed so as to draw out the information on all the three domains of our study, i.e., Input, Process and Output/Evaluation Mechanism.

Teacher Interview Schedule was the second and modified version of the previous tool. The need to modify the previous tool was felt when the analysis of it showed errors in responses. A feeling of lack of understanding for the questions was reflected in the responses.

Teacher Observation Schedule was a tool to identify the teaching skills used by the teacher, the language used by the teacher, students' behaviour in the class and assessing teacher's behaviour with the students in and outside the class. These schedules were given to the student teachers for data collection purpose and the teachers they contacted were from the schools in which these student teachers went for their two practice teaching sessions and the internship .

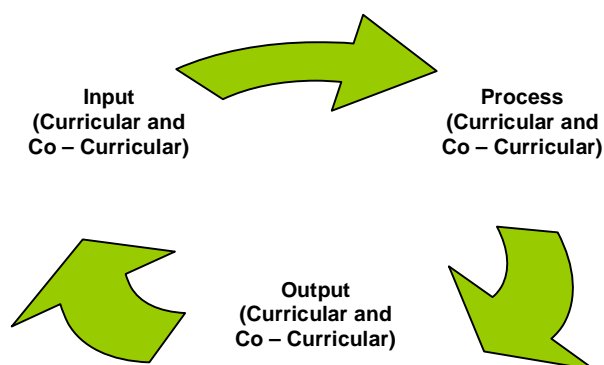
In the second phase the modus operandi was changed and Focus Group Discussion was adopted as a strategy to acquire information. Herein, Principals and Senior Academicians were invited from the chosen schools to ponder on the areas where the teachers of today need more honing/training/up gradation.

Tools and techniques employed.

The techniques of data collection were primarily Observation, Unstructured Interviews and Focused Group Discussion and the tools employed were Observation schedule of the classroom practices, Interview schedule, Anecdotal Records and Checklists to capture and then analyze the Instructional processes.

The term, 'Instructional Practices' in the study included all three of the following :

Input activities, Process activities, Output activities.



Input of Curricular Activities – included - Writing of Instructional Objectives, Knowledge of different and new teaching methodologies, Planning of yearly calendar .

Process of Curricular Activities included - Skills employed by the teacher in the class, Rapport building techniques employed by the teacher, Motivational techniques, Class management, Extent of usage of different methods.

Output of Curricular Activities included - Methods of evaluation of process, Methods of evaluation of product.

Data Collection

Data was collected from 10 schools of Vadodara city. These schools are among the known schools of Vadodara city. Data regarding classroom observation and Teachers interview was collected personally by the Researchers. The teaching learning process was observed for different subjects for two periods per each subject. Teachers were interviewed - the responses of 67 teachers have been analyzed.

Data Analysis

Analysis Of The Teacher Observation Schedule - When observation is used in quantitative research, observation is usually employed to collect data regarding the number of occurrences in a specific period of time, or the duration of very specific behaviors or events. Likewise, in this study the observations had been made to collect data regarding the number of teachers employing various strategies, methodologies in the classroom and the pupil behavior towards the teachers and their techniques of teaching. Following table shows the data in form of percentage.

TEACHER (CLASS ROOM) OBSERVATION

Sr. No.	OBSERVATIONS	PERCENTAGE (%)
1	LESSON INTRODUCED BY	
	Recapitulation of previous knowledge	66.67
	Relevant activity	16.13
	Demonstration	4.30
	None of the above	17.20
2	STRATEGIES USED IN TEACHING BY TEACHER	
	Concrete Demonstrations, Solving Problems	21.51
	Children asked to memorise	32.26
	Students asked to read from Textbooks	48.39
	Children asked to write answers from Board	18.28
	Explanations of Concepts	62.36
	Asking to apply Concepts/Principles learnt	17.20
	Relating concepts to immediate environment	27.96
	Relating concepts to previously learnt concepts	35.48
	Audio-Visual aids used for Explanation	5.37
	Reading merely from the Textbook	35.48
3	STUDENT BEHAVIOUR PATTERN IN CLASS	
	Paying attention	84.95
	Asking questions	40.86
	Doing assigned work	27.96
	Copying from the BB	37.63
	Engaged in mutual play/distracted	11.83
4	PUPIL PARTICIPATION	
	To a great extent	34.41

	Moderate extent	50.54
	Very little	17.20
	None at all	3.23
5	PUPIL RESPONSES	
	Showed understanding	80.65
	Showed lack of Understanding	9.77
	Lacked clarity of Language	4.30
6	TEACHER'S EXPLANATION	
	Clear - Specific with examples	63.44
	Language - Clear and easy to understand	74.20
	Unclear - Difficult words used	1.07
7	TEACHING AIDS USED IN CLASS	
	Blackboard	84.95
	Tape Recorder	1.07
	Charts	3.23
	Models	0.00
	Diagrams	6.45
	OHP	0.00
	Slide Projector	0.00
	Any other	4.30
8	AUDIBILITY IN CLASS	
	Satisfactory/Unsatisfactory	87.10
9	VISIBILITY IN CLASS	
	Satisfactory/Unsatisfactory	76.34
10	HOME ASSIGNMENT	
	Given	55.91
	/Not given	38.7
11	PREVIOUS HOME ASSIGNMENT	
	Checked	36.56
	Not Checked	45.16
	Checked by Monitor	3.22
12	CLASS SUMMARISING DONE BY	
	Questioning	37.63
	Problem Solving	30.11
	Consolidation of Major Points	26.88
13	INPUTS	
	Outcomes are appropriate and comprehensive to the curriculum domain	63.44
	Outcomes are correctly classified according to Bloom or another taxonomy	11.83
	Outcomes include higher order thinking	12.90
14	OUTPUTS	
	Assessments will yield sufficient and valid data on students' cognitive and affective needs	26.88
	Grading system is based on demonstration of learning	10.75
	Weightage is appropriate to the assessment type	12.90
	Record-keeping & feedback provisions for students & parents ensure accurate communication of progress	5.38
	All relevant state board curriculum standards are taught and assessed	40.86

15	ATTITUDES TOWARDS STUDENTS	
	Seems interested in students	79.57
	Gives extra help to students who ask for it	43.01
	Courteous and considerate	43.01
	Is easy to talk to both in & out of class	47.31
16	ABILITY TO AROUSE INTEREST IN THE SUBJECT	
	Thinking encouraged	48.39
	Stimulates independent study and effort	27.96
	Knowledge of subject matter thorough, sound and up to date	41.94

Analysis Of Teacher Interview Schedule - The technique of interview was used in this study and a set pattern of questions were asked to all the teachers selected as sample for the study. Analysis of this interview schedule was done with the help of percentage and frequency for giving a clear picture of the study.

Teacher Interview Analysis .

SR. NO.	QUESTIONS ASKED TO TEACHERS	PERCENTAGE (%)
1	WHO DESIGNS THE ANNUAL CALENDAR?	
	Subject head	14.92
	Supervisor	23.88
	Principal	41.8
	Self	13.43
2	ARE YOU AWARE OF BLOOM'S TAXONOMY?	
	Yes	44.78
	No	52.24
3	DO YOUR INSTRUCTIONAL OBJECTIVES CATER TO ALL 3 DOMAINS?	
	Only Cognitive	17.91
	Cognitive and Psychomotor	10.45
	All Three	52.24
4	ARE YOUR LESSON PLANS WRITTEN ACCORDING TO THESE INSTRUCTIONAL OBJECTIVES?	
	Frequently	58.21
	Sometimes	25.37
	Rarely	8.95
5	ARE YOU AWARE OF SOCIOMETRIC TECHNIQUES TO ENHANCE GROUP DYNAMICS?	
	Yes	74.63
	No	22.39
6	ARE YOU AWARE OF THE FOLLOWING TEACHING METHODOLOGIES/MODELS OF TEACHING?	
	Constructivism	32.84
	Heurism	11.94
	Concept Attainment Model	41.79
	Inductive Thinking Model	43.28

	Inquiry Training Model	34.33
	Advance Organiser	28.36
	Project Based Learning	67.16
	Technology Aided Learning	52.24
7	DO YOU PRACTISE THESE?	
	Frequently	41.79
	Sometimes	49.25
	Rarely	7.46
8	DO YOU PRACTISE ANY OTHER MODERN METHODOLOGY?	
	Pl Specify	
9	ARE YOU AWARE OF MASLOW'S HEIRARCHY OF NEEDS?	
	Yes	56.71
	No	40.3
10	IF YES, DO YOU EMPLOY THESE? VIA	
	Teaching Aids	23.88
	Activity based Teaching	43.28
	Reinforcement	35.82
11	ON THE BASIS OF YOUR EXPERIENCE, DOES THIS MOTIVATE STUDENTS?	
	Frequently	50.74
	Sometimes	26.86
	Rarely	
12	ARE YOU AWARE OF DIFFERENT STUDENT LEARNING STYLE?	
	Audio	65.67
	Visual	76.12
	Kineasthetic	35.82
13	HOW OFTEN DO YOU DESIGN YOUR TEACHING STYLES ACCORDING TO STUDENTS' LEARNING STYLE?	
	Frequently	59.7
	Sometimes	32.89
	Rarely	2.98
	Never	4.48
14	IF NEVER OR RARELY, WHY?	
	Lack of time	23.88
	Do not know procedure for implementation	2.98
15	HOW DO YOU ASSESS STUDENTS LEARNING ACCORDING TO THEIR ABILITIES?	
	Oral Test	64.18
	Written Test	71.64
	Activity based	53.73
	Performance based	44.78
	Group/Individual	43.28
	Usage Evaluation Rubric	19.4
16	IN YOUR QUESTION PAPER, IS APPROPRIATE WEIGHTAGE GIVEN TO	
	Objectives	64.18
	Different types of learners (Bright, Average, Slow)	79.1
	Different types of test items	53.73
	Validity	32.83

	Reliability	35.82
	Objectivity	40.3
17	DO YOU PREPARE A BLUEPRINT BEFORE PREPARING YOUR TERM AND ANNUAL EXAM PAPER?	
	Yes	26.57
	No	11.94
18	WHAT ASSESSMENT MODE DO YOU FOLLOW?	
	Formative	20.9
	Summative	5.97
	Formative and Summative	76.12
19	ANY WORKSHOPS/CONFERENCES ATTENDED RELATED TO PROFESSIONAL DEVELOPMENT, IF YES GIVE DETAILS	

Major Findings Of The Study.

Analysis of the data led to the following understanding

- Audio-Visual aids are used by only a few teachers as a strategy in teaching.
- The usage of teaching aids, both traditional as well as modern, is minimum except for the black board which is found to be used extensively.
- The percentage of teachers not assigning homework to the students is quite large.
- A majority of teachers are not aware of Bloom's Taxonomy and hence are unable to design their inputs accordingly.
- While teaching the students, not many teachers aim for developing the higher order thinking skills.
- The assessment techniques used do not cater to the current trends in education.
- It is observed that teachers are interested in their students to a great extent which is a good indication in the teaching-learning process.
- Teachers are not able to stimulate independent study and effort in the students.
- Designing of lesson plans is an area preferred for receiving training, by the teachers.
- Teachers do need guidance for making support material - both manual and technology based.
- Teaching skills though considered to be innate are required to be taught to the teachers for better efficiency.
- Understanding group dynamics and their classroom implications is a 'must know' area for the teachers with the evolution in the present trends.
- Technique of Sociometry is an area about which very few teachers have knowledge about. In fact, the need to understand and implement these techniques is rising day by day with the increasing complexities among children.
- Mihaly's Csikzentmihalyi's Flow Theory is known only by a handful of the teachers - -

that too not in great detail. Therefore, teachers need to have detailed knowledge about the Flow Theory.

- Different subjects and topics need to be taught using different methods hence ‘methods of teaching’ is the most desirable area for training by the teachers.
- ‘Evaluation Mechanism’ is a fast evolving field wherein much has been done to study student’s performance closely and over the years. It is no longer as simple as evaluating student academic performance over allotted time periods. It is now Continuous Comprehensive Evaluation (CCE) with an assessment of different aspects of student growth, and so now it is essential for the teachers to be aware about these techniques.
- Elementary statistical technique is one such dimension of evaluation system that many teachers are not aware of and therefore training is a must.
- Making of performance enablers (rubrics) is again an area where the teachers have ambiguity in designing as well as implementing and hence calls for training.

Implications of the Study

This Research Initiative was conducted keeping in mind the need to identify possible areas where practicing teachers may need further training and professional upgradation and then using these inputs to enrich the Teacher Education Program as also making it more relevant to the emerging practitioner i.e. the student teachers of today who are enrolled presently in the Teacher Education program. The Education Commission (1964–66) recommended that in-service education for teachers should be organized by universities and teacher organizations to enable every teacher to receive two or three months of in-service education once in five years; that such programmes should be based on research inputs; that training institutions should work on a 12-month basis and organise programmes like refresher courses, seminars, workshops and summer institutes”. - **NCF-2005 (Pp. 111)**

The final phase of the Research Study entailed using the research findings to design An Online Training Program benefiting the present and future practitioners.

The Online Training Program is in the final stages of preparation and would be implemented shortly.

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