

# A Study of Awareness of 'Open Book Examination' System

MANDIRA SIKDAR\*

SWATI AMRAOTKAR\*\*

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## Abstract

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*Very few issues are likely to have a crucial impact on the future as the training and education of 'human resources'. The quality of education imparted assumes extraordinary significance in this context—What are the goals of education today and are our current educational practices in conformity to the same? Today, Education, while not losing sight of its traditional goals (reading, writing, arithmetic), will also have to equip individuals to live effectively in the 'knowledge society', i.e. acquire relevant knowledge and inculcate and interpret new values that will in turn guarantee them the ability to keep pace with the evolution of their environment. Our schools and educational institutions must conform to this emerging reality-via the designing of appropriate instructional processes and evaluation systems that gauge the intellectual growth of students and not merely their ability to memorise information and regurgitate. Unfortunately, our Educational practices and systems of examination have not been able to keep pace with the changing context—they still highlight the importance of rote memorisation, fail to test higher order skills like critical thinking, reasoning, etc., and are largely inflexible with no allowance made for different learners. What is needed urgently is examination reform wherein there is a shift in emphasis to testing competencies, understanding of concepts taught, and development of creative and critical thinking abilities. Although efforts towards reforming examination system are started, i.e, continuous comprehensive evaluation and making examination optional at secondary grade. However, some more innovations/alternatives need to be tried in Indian Education System which caters to tremendous diversity of the country. In view of the aforementioned, Open Book Examination (OBE) could be a significant alternative assessment system that could be implemented keeping in mind*

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\* Assistant. Professor, B.Sc. B.Ed. Programme, Navrachana University, Vadodara.

\*\* M.Ed. Student, Navrachana College of Education, Navrachana University, Vadodara.

*its several benefits and this Study was conducted to study the awareness regarding the (OBE) system and the barriers to its implementation. The study concluded that while OBE was considered a necessity, implementation of the same could only be a long-term vision keeping in mind the preparatory measures that would be needed for its effective implementation.*

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## **Introduction**

Very few issues are likely to have a crucial impact on the future as the training and education of 'human resources'. The quality of education imparted assumes extraordinary significance in this context—What are the goals of education today and are our current educational practices in conforming to the same? As educationists, should our objective be the development of skills, creating new knowledge or disseminating existing knowledge? Should education emphasize the dissolving of differences for a stronger sense of nationhood or should education focus on the shaping of sensibilities and values of future global citizens?

The world is changing rapidly; there are new and emerging priorities and we are grappling with the 'proper' role of Education. In the present context, Education, while not losing sight of its traditional goals (reading, writing, arithmetic) will also have to equip individuals to live effectively in the 'knowledge society' i.e. acquire relevant knowledge and inculcate and interpret new values that will in turn guarantee them the ability to keep pace with the evolution of their environment (NCF-2000).

Our schools and Educational Institutions must conform to this emerging reality-via the designing of appropriate instructional processes

and evaluation systems that gauge the intellectual growth of students and not merely their ability to memorise information and regurgitate.

Education must encourage students to analyse and evaluate experiences, to doubt, to question, to investigate, to be inquisitive and think independently. Unfortunately, what is presented and transmitted as knowledge in schools leaves out vital constituents of man's epistemic enterprise and most schools promote a regime of thought which discourages thinking and precludes new and surprising insights. To add to this situation, our systems of examination too unfortunately have not been able to keep pace with changing times. They still highlight the importance of rote memorisation, fail to test higher order skills like critical thinking, reasoning, etc., and are largely inflexible with no allowance made for different learners (NCF-2005).

The aim of examination should be all-round development of the students but the present system of examinations does not fulfil this objective. Until quite recently, memorisation occupied a dominant place in all written examinations, which almost completely overlooked the testing of higher objectives like understanding, and the application of knowledge and skills. This, in turn, reflected on the instructional programmes where the

development of these higher abilities on the part of the students also was invariably overlooked.

The Secondary Education Commission (1953) had stated that the crippling effect of external examination on quality of Instruction was so great that examination reform had become crucial to all progress and would have to go hand in hand with improvements in teaching (National Focus Group, 2006). The major goal of examination reform should be to improve the reliability and validity of examinations and to make evaluation a continuous process, aimed at helping the student to improve his level of achievement rather than merely 'certifying' the quality of his performance at a given moment of time (NPE, 1968).

Two main things have therefore to be done if the existing examination system has to be reformed. First, its domination over the educational system has to be minimised and secondly, the quality of examinations has to be improved. What is needed urgently is examination reform wherein there is a shift in emphasis to testing competencies and away from memory which would certainly reduce stress, in addition to aiding the validity of exams.

It is in view of the above that a long-term move towards open-book exams can be envisaged. In an Open Book Examination, the focus shifts from mere reproduction of information to the processing of information—the ability to apply a theory, test a theory, propose an explanation, interpret meaning, infer predictions, design an experiment, find logical inconsistencies and so on. Such an examination

simultaneously tests the students' understanding of concepts taught, development of their creative and decision-making abilities. It is ideally suited to teaching programmes that especially aim at developing the skills of critical and creative thinking (Mohanan, 1997).

The Open Book Examination is increasingly becoming an essential evaluation tool in education, as it is able to evaluate skills such as conceptualising, problem-solving and reasoning (Bisse, 1993), (Feller, 1994), (Ioannidou, 1997), (Theophilides et al, 1996). Students preparing for Open Book Exams interrelate various information and work creatively (Theophilides & Koutselini, 2000), (Verma, 2002). Such an examination will eventually eliminate rote memorisation done with the goal of simply reproducing what is memorised, not memorisation that enhances the efficiency and speed of thinking in a given domain.

Tussing (1951) posited that the Open-Book Examination "removes much of the fear and emotional block encountered by students during examination, while, at the same time, it emphasizes practical problems and reasoning rather than mere recall of facts".

However, research has also proved that while the transition from the traditional pattern of examination to new pattern such as the Open Book Exam may ensure creative use of the knowledge gained and reduce examination stress, (Theophilides & Dionysiou, 1996), (Boniface, 1985), (Krarup, Naeraa & Olsen, 1974), (Weber,

Mcbee & Krebs, 1983), it will require an adaptation period both for examiners and the examinees (Gupta, 2007). Studies conducted on examination anxiety showed lower anxiety level for Open Book examinations compared to the closed book exam pattern (Vyas & Vyas, 2009) using knowledge in creative ways and facing examination with optimism (Dwivedy, 2010). Many researchers have also concluded that not all courses are suitable for Open Book Examination.

Summarising the above, Open Book Examination could be a significant alternative assessment system that could be implemented keeping in mind its several benefits and a survey was conducted to study the opinion of practitioners and administrators regarding the Open Book Examination System titled 'A Study of Awareness of Open Book Examination System.'

The primary objective was to study awareness regarding the Open Book Examination and barriers to its implementation.

The Specific Objectives of the study were -

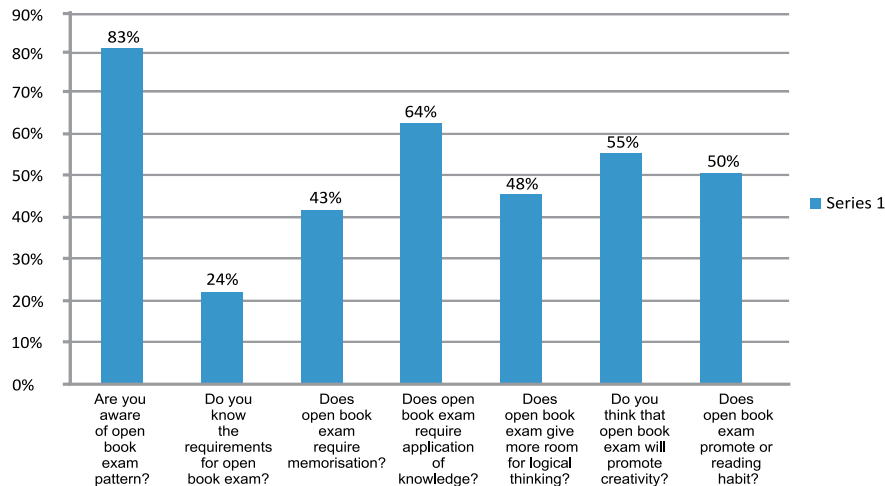
1. To study awareness about Open Book Examination among
  - (a) School teachers
  - (b) School principals
  - (c) Government officials.
2. To study barriers to the implementation of Open Book Examination.
  - (a) School teachers
  - (b) School principals
  - (c) Government officials.

### **Methodology and Design of the Study**

The survey method had been used for the collection of data in accordance with the nature of the present study. The study was conducted in Vadodara City, an important cultural and educational part of Gujarat State. There are variations in the management of education in Vadodara City—namely, Private Aided, Private Unaided, Municipal School Board Schools, Central and State Board schools, State and Private Universities/Institutions that cater to the varied educational needs of its citizens from Pre-primary to Higher Education.

Secondary schools affiliated to GSHSEB (Gujarat Secondary and Higher Secondary Education Board) in Vadodara are categorised into different clusters (Shala Vikas Sankul) in the rural and urban areas for ease of administration. A total of 66 English medium schools affiliated to Gujarat Secondary and Higher Secondary Education Board are located in Vadodara District and city-out of these 66, 60 English medium secondary schools of (GSHSEB) are in Vadodara city and are categorised under cluster (Shala Vikas Sankul) five to eight.

The population of the study comprised school teachers and principals of English Medium Schools (Secondary Sections) of Vadodara City; Government Officials of District Education Office, Vadodara. The sample schools from these were selected randomly and a total number of 30 schools out of 60 belonging to the four different clusters (SVS-numbers 5–8) of Vadodara city were covered.



**Fig.1 (Ques. 1-7): To Study awareness of open book examination among teachers.**

A representative sample was thus selected by the process of stratified random sampling.

Different tools were prepared for data collection, namely questionnaire for school teachers; semi structured interview for school principals and government officials. The questionnaire comprised two sections. The first section dealt with study of awareness of Open Book Examination among school teachers while the second section dealt with study of barriers in the implementation of Open Book Examination.

The survey was conducted with 320 school teachers, 41 school principals and three officials from District Education Office Vadodara. There were a total of 364 respondents.

### **Data Analysis and Interpretation**

The first objective to study awareness about open book examination among schools teachers was analysed as follows—

The data analysis revealed that a majority of teachers were aware of the OBE pattern of examination (83%) and only very small percentages were not aware (11%). There were a significantly large group of respondents who highlighted the advantages of OBE—64 per cent opined that it would enable application of knowledge; 48 per cent responded that OBE would give more room for logical thinking; 55 per cent opined that OBE would promote creativity and 50 per cent responded that OBE would promote serious reading habits. Significantly, 62 per cent responded that OBE would be less stressful than the traditional examinations; 43 per cent responded that OBE required memorisation of facts for application in unique situations.

Fifty one per cent teachers responded that OBE would indeed be a good option to assess core subjects like Social Studies, Science and Maths. Interestingly, there were a group of

**Table 1: Awareness of Open Book Examination among teachers**

<i>Questions</i>	<i>Yes</i>	<i>No</i>	<i>Not Sure</i>
Is the Open Book Exam appropriate for language group English, Gujarati, Sanskrit or Hindi?	34%	49%	17%
Is the Open Book Exam appropriate for core subjects Social Studies, Science or Maths?	51%	35%	14%
Are you aware of the mode of assessment for Open Book Exam?	15%	68%	17%
Do you think that Open Book Exams at school level are required to be supervised?	60%	30%	10%
Are Open Book Exam less stressful than traditional pattern?	62%	20%	18%
Are you trained for conducting Open Book Exam?	08%	87%	05%
Have your students been exposed to Open Book Exam?	18%	73%	09%
Is your school ready for Open Book Examination pattern?	09%	36%	55%
Are you aware of schools of Vadodara city who implemented Open Book Exam on experimental basis?	10%	75%	15%

teachers who responded that they had been exposed to the OBE pattern (18%) and were aware of the mode of assessment for OBE (15%). There were a group of teachers who responded that they were aware of schools that had implemented OBE on experimental basis (10%).

The positive and encouraging fact that emerged from this was that looking

to its potential benefits, an initiative towards the OBE had been taken by a very small percentage of schools.

The following table is an analysis of the barriers perceived to the implementation of OBE in schools, by the functionaries themselves:

Some of the barriers like emerged were that these exams would be more difficult to design (60%); OBE will be

**Table 2: Barriers to Implementation of Open Book Examination**

<i>Sr. No</i>	<i>Questions</i>	<i>Yes</i>	<i>No</i>	<i>Not Sure</i>
1	Are Open Book Examinations more difficult to design?	60%	24%	16%
2	Is thorough understanding of subject required to frame Open Book Exam questions?	81%	12%	07%
3	Do Open Book Exams require students to critically study the material?	70%	16%	14%

4	Do you think that Open Book Exams will be more challenging for students?	52%	37%	11%
4.5	Do you think students will take time to adapt to the system as they are not familiar with it?	69%	15%	16%
5	Do you think Open Book Examination will not be suitable for average student?	41%	41%	18%
6	Are Open Book Examinations more time consuming?	68%	18%	14%
7	Do you think that the students will have to be oriented for Open Book Exam?	80%	09%	11%
8	Do you think teachers will have to be trained to conduct Open Book Exams?	79%	11%	10%
9	Would it be difficult for students to get admission in different States if they pass through Open Book Exams?	40%	18%	42%
10	Is it a difficult task to introduce Open Book Examination system?	43%	31%	26%

more challenging for students (52%) ; students would take time to adjust with this system (69%); these exams would be more time-consuming (68%) and that teachers would have to undergo specific training to conduct OBE (79%). Interestingly, one barrier to implementation was that thorough understanding of subject would be required to design OBE (81%)! Also, 43per cent responded that it would be difficult to introduce OBE almost indicating a resistance to innovative practices!

### **Interpretation of the Semi-structured Interview of School Principals**

A large percentage of school principals (51%) were of opinion that Open Book Examination could be implemented initially on small scale. The said pattern would develop creativity among students and require them to study differently; whereas 43 per cent

of Principals were of the opinion that it would be difficult to implement Open Book Examination at school level and they found it a difficult proposition.

However, (56 per cent) of the principals were of the opinion that implementation of Open Book Examination could be a long-term vision. Majority of principals (69%) were of the opinion that there was a need to admit changes in the existing system of examination to be able to introduce the Open Book Examination.

Also, changes were necessary in terms of changed teaching methodologies, training of teaching staff, library updation, appropriate teacher student ratio, etc. (sixty three per cent) of principals were of the opinion that students too would need to be oriented to the requirements of Open Book Examinations namely careful and critical study of content, developing self-learning habits, etc.

Fifty six per cent Principals were of opinion that they themselves played an important role in the implementation of the Open Book Examination in terms of ensuring a renewed role of teachers as guides and facilitators over being mere instructors, ensuring change in teaching methods and designing the requisite assessment mechanisms, etc. (56 per cent) Principals were of opinion that necessary training from government authorities i.e. State Education Board, would be required to be organised for the meaningful and successful implementation of Open Book Examination, etc.

#### **Interpretation of Interview with Government Officials**

Government officials felt that students and teachers would find the initial exercise difficult having practised the traditional pattern of examinations for such a long time. Nature of Open Book Exam would be totally different and thus a number of changes would be required to be admitted prior to implementation of open book exams at school level. Teachers would be required to be trained; students also would be required to be oriented for the new pattern as they were never exposed to this format.

#### **Conclusion**

The study on awareness about Open Book Examination format revealed that a significantly large number of secondary school teachers were aware of the format. It was generally accepted by them that Open Book Examinations would create an enriched learning environment, offer students an opportunity to better understand

and apply higher order skills. Also, students' learning could be enhanced by implementing the Open Book Examination format as implementation of the same would necessitate critical thinking, reasoning and application of knowledge. Students would accomplish more from the implementation of the Open Book Exam in comparison to the traditional one.

However, a shift from traditional exams to Open Book Exams would necessitate additional time so as to permit both teachers and students to get adjusted with the format. A definite discipline would be imposed on the teachers to set questions which cannot simply be answered by recall of information.

The results of this study indicate that the Open Book Examination could be a reasonable alternative or an addition to traditional assessment methods. Benefits of Open Book Exam could not be ruled out but at the same time to put this format into practice would be both time-consuming and difficult keeping in mind the orientation, preparation and training that would be required before finally implementing it. It could definitely be a long-term vision.

The study revealed that a very large number of teachers were aware of the OBE pattern of examination. The teacher responses showed that they were aware of the benefits of the OBE and some students may have been exposed to the OBE. However, a very small population of teachers responded positively when asked whether their schools were ready for implementing this pattern of examination.



Interestingly, the questionnaire to barriers to implementation revealed that the major barrier to implementation was that thorough understanding of subject was required to implement OBE! And, also that teachers would need to be trained to conduct examinations of this pattern. Some of the other serious barriers were students getting oriented and these exams being very time-consuming. The administrators and officials despite all the barriers thought it could be a significant initiative although, as of now, a long-term vision only.

*“Trying to devise a good and effective Open Book Examination can be a challenge that we must try to take up in our curricular efforts at all levels of school. This would require teachers and examination setters to emphasise the interpretation and application of learning over the arguments and facts that can be located in the book. There have been successful demonstrations that such examinations can be carried out on a large scale, and that teachers can themselves be trusted with moderating the results of such examinations. In this*

*way, the assessment of projects and lab work can also be made credible and sound. It is important that after receiving their corrected papers, children rewrite the answers and that these are again reviewed by teachers to ensure that children have learnt and gained something out of the ordeal.” (NCF 2005 p-74)*

In conclusion, it emerges that we must develop 'assessment literacy' amongst teachers and others responsible for teaching-learning in schools and educational institutions. Assessment must be used constructively to measure learning outcomes and subsequently raise standards. A shift in emphasis is needed and for this to happen there has to be a fundamental shift of emphasis both at the levels of policy and practice. Policy makers will have to take the initiative to implement the powerful insights emerging from educational research and thereby establish new and required standards. Practitioners would have to discard the conventional and clichéd and embrace innovative and essential trends.

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