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Reforming school examinations through open-book assessment: Prospects and challenges under NEP 2020 and NCF-SE 2023

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Abstract
For many years, school exams in India have rewarded students who can repeat what is written in the textbook. The National Education Policy (NEP) 2020 and the National Curriculum Framework for School Education (NCF-SE) 2023 ask for something else: assessment of conceptual understanding, application and problem-solving rather than memorisation. Open-book examination (OBE), in which students may consult textbooks, notes or other approved resources while answering, is one format proposed to serve this aim. The Central Board of Secondary Education (CBSE) experimented with a version of it called the Open Text-Based Assessment between 2014-2017 and has now approved open-book assessment for Class 9 from the 2026-27 session. This conceptual paper looks at what OBE means, the forms it takes, why school education needs it and grounds the format in the revised Bloom's taxonomy and constructivist learning theory. It compares open-book and closed-book examinations, maps OBE onto the assessment provisions of NEP 2020 and NCF-SE 2023 and considers the skills it can develop as well as its advantages and limitations. A review of the Indian experience leads to a phased strategy for schools. The central argument is that OBE can help the schools shift away from rote learning only if question design, teacher preparation, student orientation and equal access to materials are explored together.

Keywords: Open-book examination, assessment reform, NEP 2020, NCF-SE 2023, school education CBSE

Introduction

In Indian schools, exams are one of the most important things. Marks determine subject streams and admissions, and many families treat them as a measure of what a child is worth. NCF-SE 2023 speaks honestly about the current condition of school assessment. It calls it "mechanical and routinised" and "mostly focussed on measuring rote learning of content rather than on measuring achievement of Competencies and Learning Outcomes" (National Curriculum Frameworks (NCF-SE, 2023, p. 98). NCF-SE 2023 [19] adds that board exams mostly check whether students can repeat what they have memorized. Because of this, only a few skills are actually tested (p. 108)

The question paper is also a cause of the problem. If questions only ask students to define, list or describe, then memorising model answers is the quickest way to prepare and guidebooks and coaching classes support this. Saxena (2026) [23] sees the same pattern in Indian higher education, where question stems such as "what", "where" and "describe" dominate and "why", "design" or "create" are rare. Students learn whatever the examination rewards. When it rewards recall, teaching slides towards recall too, whatever the syllabus says about understanding.

NEP 2020 sets a different direction. Assessment, it says, will move away from a form that "primarily tests rote memorisation skills" towards one that "is more competency-based, promotes learning and development for our students and tests higher-order skills, such as analysis, critical thinking and conceptual clarity" (Ministry of Human Resource Development [MHRD], 2020 [17], para. 4.34). NCF-SE 2023 makes this a rule for every classroom: "Memorisation must not be the primary form of learning or of assessment"(NCF-SE, 2023, p. 96). Among the forms of assessment available to schools, it lists open-book tests, which "shift the focus from recall to application and synthesis" (p. 102).

Indian schools have faced this situation before. CBSE introduced the Open Text-Based Assessment (OTBA) for Classes IX and XI in March 2014, only to withdraw it from the 2017-18 session, called "modicum partial attainment of desired objectives" (Central Board of Secondary Education [CBSE], 2013, 2017). In 2025 [8, 9, 20], the Board approved open-book assessment for Class 9 from the 2026-27 session (Shukla, 2025) [23, 25]. The format is back on policy agenda, but the OTBA suggests that changing the rule of examination does not on their own, change how students learn or how teachers set papers.

Much of what has been written on OBE comes from higher and professional education (Durning *et al*., 2016; Saxena, 2026; Shunko, 2025) [10, 23, 25]. For Indian schools, the evidence is scattered across small studies, dissertations and newspaper reports. This paper attempts a conceptual analysis of OBE for school education. It explains what OBE is and the forms it takes, why schools need it and on what theoretical grounds, how it differs from closed-book examination (CBE) and where it fits in the assessment vision of NEP 2020 and NCF-SE 2023. Later sections take up the skills OBE can develop, its advantages and limitations, the Indian experience and some practical suggestions. OBE is treated here as an examination format; its effects on specific learning outcomes lie outside the scope.

Review of Related Literature

1. Studies from other countries

Early comparative studies focused on how students prepare. Working with 201 college students in Cyprus, Theophilides and Koutselini (2000) [27] found those facing closed-book examinations tended to delay study until the end of the semester, stick to assigned readings and memorise. Those facing open-book examinations read more widely and tried to connect what they found. The format of the examination was shaping study behaviour well before anyone sat the examination.

Cognitive psychologists have approached OBE through the testing effect. Agarwal *et al*. (2008) [1], open-book tests gave better initial performance, but after a week retention was much the same as after closed-book tests with feedback. A later study found that students who expected an open-book test did worse on a delayed closed-book test than those who expected a closed-book one (Agarwal & Roediger, 2011). Rummer *et al*. (2019) [2, 21], in a university field experiment, reported a learning advantage for closed-book practice tests. The most recent systematic review calls the overall effect of format on learning is mixed: closed-book assessments are linked with a lower rate of forgetting, yet students prefer open-book ones (Permzadian & Cho, 2025) [20].

Two systematic reviews summarise the wider field. Durning *et al*. (2016) [10] checked 4,192 records and selected 37 studies. They looked at how students prepared, how they performed, testing effects and what people thought about open-book exams. The findings about preparation before the exam were mixed. Students may prepare more for closed-book exams and students take longer to finish open-book exams. Shunko (2025) [25] reviewed 20 studies covering 3,349 participants from 11 countries, all of them in higher education. Variants of the format have their own literature. Myyry and Joutsenvirta (2015) [18] described how open-book, open-web online examinations can be designed to support university students' learning, and Bengtsson (2019) [5] reviewed take-home examinations in higher education. In a four-cohort study, Spiegel and Nivette (2024) [26] found a slight academic advantage for in-class examination over take-home examinations, with format mostly unrelated to well-being.

2. Studies from India

In Indian higher education, the University of Delhi's online OBE during the 2020 [17] lockdown is the best documented case (Ashri & Sahoo, 2021). Saxena (2026) [4, 23] records that several central universities and Indian Institutes of Technology used open-book formats during the pandemic and that the All India Council for Technical Education had permitted OBE in engineering colleges in 2019 [5].

At school level the studies are fewer and most are small. In Vadodara, Maity (2016) [16] and Milton (2018) built open-book environments for Standard VIII English and Social Science and reported positive student responses. Ganna (2017) [12] gave four open-book and four closed-book tests to 60 Class X students in Telangana and interviewed teachers from 19 CBSE schools. Many of those teachers did not want closed-book examinations replaced, though some suggested combining the two.

Gujral and Gupta (2017) [13] surveyed CBSE teachers and students and found support for higher-order and value-based questions, alongside a common doubt that OBE helps long-term retention. Vats *et al*. (2024) [28] studied open-book examinations with secondary students in Panipat district. Most recently, Sakshi and Devi (2025) [22] used interviews, focus groups and observation to explore how students, teachers and administrators in CBSE schools experienced open-book assessment. Participants described a slow shift towards application and synthesis while teacher readiness, student misconceptions, time management and unequal resources emerged as barriers.

3. Research gap

The review points to three gaps. First, most evidence on OBE comes from university, medical and professional programmes, where students are older and conditions differ from those in schools. Second, Indian school studies tend to be small, short and limited to one or two subjects and several exist only as unpublished dissertations. Third, conceptual work has concentrated on higher education. Saxena (2026) connects OBE with NEP 2020 [17, 23] but says nothing about NCF-SE 2023 or school examinations and Sakshi and Devi (2025) [22], though focused on CBSE schools, offer little theoretical grounding. There is still no clear explanation that connects open-book examinations (OBE) with the assessment guidelines of NEP 2020 and NCF-SE 2023, and also learns from the OTBA experience.

Concept and Types of Open-Book Examination

In an open-book examination, students may consult approved resources such as textbooks, class notes or reference material while they answer (Saxena, 2026) [23]. NCF-SE 2023 defines it in similar terms and adds that such tests "assess the ability to process or use available information and apply the same in various contexts"(NCF-SE, 2023, p. 102). Permission to consult material, however, is only half the definition. When students can use the book, a question whose answer can be copied directly from it does not test anything. So, an open-book exam is defined by the type of questions it asks, just as much as by the materials it allows.

The format comes in several forms, which differ in what students may use and where they take the test (**Table 1**). A restricted OBE allows only specified materials, for example the prescribed textbook, a formula sheet or a passage supplied by the examining body. CBSE's OTBA belonged to this group: text material and case studies reached schools in advance and were reprinted in the question paper (CBSE, 2013). NCF-SE 2023 proposes something similar for mathematics, where examinations "could provide 'fact sheets' consisting of information, such as formulae, and definitions" (NCF-SE, 2023, p. 270). An unrestricted OBE lets students bring any printed material. Take-home examinations give students hours or days to complete the task at the place wherever they choose (Bengtsson, 2019) [5] and open-web examinations allow internet access, usually within a timed online session (Myyry & Joutsenvirta, 2015) [18].

Table 1: Types of Open-Book Examination

Type	Permitted resources	Setting	Suitability for schools
Restricted (including supplied text)	Specified materials only, such as the prescribed textbook, a formula sheet or a passage supplied by the board	Timed, in the examination hall	High; equal access and easy control
Unrestricted	Any printed material the student brings	Timed, in the examination hall	Moderate; depends on equal access to books and notes
Take-home	Any material; tasks completed over hours or days	Outside the classroom	Low for examinations; better for projects and assignments
Open-web (online)	Internet and digital resources	Timed online session	Low; needs devices, connectivity and supervision

Note: Compiled by the author from Saxena (2026), Bengtsson (2019), Myyry and Joutsenvirta (2015) [5, 18, 23], CBSE (2013) and NCF-SE (2023).

For school education, restricted and supplied-text formats are the most practical. All students get the same conditions, the format works well with pen-and-paper exams that most schools use and the board or teacher decides what information is available for students. Take-home and open-web formats cause problems because students have different resources at home and may take help from others. These formats are better for projects and assignments than for examinations.

Need for Open-Book Examination in School Education

The first reason is that recall-based question papers narrow the scope of learning. NCF-SE 2023 observes that rote memorisation and coaching come first for Board examinations "while real learning through understanding, thinking, analysing and doing becomes secondary" (NCF-SE, 2023, p. 98). If an examination cannot reward understanding, teachers have little reason to teach for it.

The second reason concerns the place of information in students' lives. Facts that once had to be held in memory are now a search away. Durning *et al*. (2016) [10] frame their review around this "rapid expansion and accessibility of knowledge". The more useful abilities for today's students are knowing what information a problem calls for, where to find it and how to judge and use it. A closed-book paper has no way of testing these. A well-designed open-book paper does.

The third reason is content load. NCF-SE 2023 notes that the burden of an overloaded curriculum "is exacerbated" by Board examinations that test the reproduction of facts (NCF-SE, 2023, p. 108). NEP 2020 wants content cut to core essentials "to make space for critical thinking and more holistic, inquiry-based, discovery-based, discussion-based and analysis-based learning" (MHRD, 2020, para. 4.5). With reference material allowed, students no longer need to memorise peripheral details such as dates, constants or formulae and assessment can turn to what they can do with them.

Finally, there is the question of validity. When the curriculum aims to build competencies, an exam that only tests memory is checking something the curriculum did not plan for. NCF-SE 2023 itself raises "serious concerns over the validity and reliability" of Board examinations as they stand (NCF-SE, 2023, p. 108). OBE is one way of bringing examinations closer to curricular goals.

Theoretical Basis

1. Revised Bloom's taxonomy

The revised taxonomy arranges cognitive processes into six categories (remember, understand, apply, analyse, evaluate and create) and separates four kinds of knowledge: factual, conceptual, procedural and metacognitive (Anderson & Krathwohl, 2001; Krathwohl, 2002) [3, 15]. Closed-book school papers cluster at "remember" and deal mostly in factual knowledge. Once the book is open, recalling a fact earns little because the fact is available on the page, so questions have to move up towards applying, analyzing, evaluating and creating. The taxonomy also clarifies what OBE does to knowledge. Much factual knowledge moves out of the student's head and onto the page, leaving conceptual and procedural knowledge as the main targets of assessment.

None of this happens automatically. A paper of recall questions with the book open becomes an exercise in finding and copying text, and Saxena (2026) [23] warns that poorly designed OBEs can simply repeat recall-based questioning in an open format. The taxonomy is therefore useful mainly as a design tool: it gives teachers a way to check whether each item demands more than finding an answer.

2. Constructivism and authentic assessment

In constructivist theory, learners build knowledge actively, linking new information to what they already know. Vygotsky (1978) [29] gave cultural tools a central place in this process, since human thinking is mediated by signs, texts and instruments. Seen this way, a book using examination hall is a thinking tool and using it well is part of being competent. Biggs (1996) [6] applied constructivist ideas into assessment through constructive alignment, in which intended outcomes, teaching activities and assessment tasks all point the same way. A curriculum that aims at reasoning needs an examination that asks for reasoning.

OBE also fits comfortably with authentic assessment, where tasks resemble the way knowledge is used outside school (Wiggins, 1990) [30]. Adults who solve real problems usually look things up in manuals, records and books. Very few depend only on what they remember.

Boud and Falchikov (2006) [7] argue that assessment should prepare students for learning after the course ends and finding and judging information is one of the abilities such learning rests on.

The theory also has a counterweight. Retrieval practice research shows that recalling information strengthens memory (Agarwal *et al*., 2008) [1], and expecting an open-book test can lower later recall (Agarwal & Roediger, 2011) [2]. OBE should therefore sit alongside retrieval-based practice rather than replace it, particularly for the foundational knowledge students need to carry with them.

Open-Book versus Closed-Book Examination

Behind the two formats lie different ideas of what it means to know a subject. Closed-book examination treats knowledge as something stored in memory and checks whether it can be reproduced. Open-book examination treats it as something to be used and checks whether students can apply it to situations they have not met before. The difference shows up in question design, preparation, conduct and marking (Table 2).

Table 2: Open-Book and Closed-Book Examinations Compared

Aspect	Open-book examination	Closed-book examination
View of knowledge	Knowledge as something to be used	Knowledge as something stored and reproduced
Main cognitive demand	Apply, analyse and evaluate	Remember and understand
Typical questions	Unseen cases, data interpretation, justification and problem solving	Definitions, lists, descriptions and short factual items
Student preparation	Understanding concepts, organising notes and practising use of the book	Memorising content and model answers
Resources during the test	Consulted selectively to support reasoning	Not permitted
Setting the paper	Demanding; items must resist copying	Relatively easy; items can be drawn from the text
Marking	Needs rubrics for open-ended answers	Simpler for objective and short-answer items
Best suited for	Application of concepts and reasoning	Core knowledge that must be recalled quickly

Note: Compiled by the author, drawing on Saxena (2026) [23], Theophilides and Koutselini (2000) and Durning *et al*. (2016) [10, 27].

This comparison does not make one format better than the other. Students prepare differently for each (Theophilides & Koutselini, 2000) [27], closed-book testing supports retention (Permzadian & Cho, 2025) [20] and open-book papers take longer to complete (Durning *et al*., 2016) [10]. Some knowledge, such as basic number facts, spellings or safety rules, has to be available instantly and is better assessed without books. A balanced plan for school assessment would keep closed-book items for core knowledge and use open-book items for application and analysis, much as Saxena (2026) [23] proposes for higher education.

Alignment with NEP 2020 and NCF-SE 2023

NEP 2020 does not prescribe any particular examination format. Its chapter on assessment deals with purpose and direction: assessment should be regular and formative, competency-based and focused on higher-order skills (MHRD, 2020, para. 4.34). On Board examinations, it says they will test "primarily core capacities or competencies rather than months of coaching and memorisation" (para. 4.37). That is a fair description of the kind of examination OBE is designed to be.

NCF-SE 2023 translates the policy into curricular terms and is more specific. One of its key principles of assessment is that examinations "should move away from testing rote memorisation and instead focus on conceptual understanding, application of concepts, problem solving abilities, critical thinking and other such capacities" ((NCF-SE, 2023, p. 99). It names open-book tests as a form of assessment (p.102) and its mathematics chapter suggests that "open book assessments can go a long way towards reducing anxiety in students" (p. 270). The framework also discusses assessment for learning and assessment as learning (pp. 97-98). An open-book task done in class, followed by a discussion of how students found and used information, can serve both. Table 3 sets out these links.

Table 3: Links between Policy Provisions and Open-Book Examination

Provision	Source	Link with OBE
Assessment to shift from rote-based testing to competency-based assessment of “analysis, critical thinking and conceptual clarity”	NEP 2020, para. 4.34	OBE removes the reward for recall and directs questions to application and analysis
Board examinations to test the core capacities rather than coaching and memorization	NEP 2020, para. 4.37	OBE questions cannot be answered from memorised model answers
Content reduced to the “core essentials, to make space for critical thinking”	NEP 2020, para. 4.5	Reference material relieves students of memorising peripheral facts
“Memorisation must not be the primary form of learning or an assessment”	NCF-SE 2023, p. 96	OBE makes memory a smaller part of the examination
Examinations to focus on conceptual understanding, application and problem solving	NCF-SE 2023, p. 99	OBE items are built around these capacities
Open-book tests shift the focus from recall to application and synthesis	NCF-SE 2023, p. 102	Direct recognition of the format
Fact sheets in mathematics examinations; open-book assessment can reduce anxiety	NCF-SE 2023, p. 270	Supports restricted OBE with formula and definition sheets
Assessment for learning and assessment as learning	NCF-SE 2023, pp. 97–98	Classroom OBE tasks followed by discussion serve formative purposes

Note: Compiled by the author from MHRD (2020) and NCF-SE (2023).

Policy alignment sets a direction; it does not guarantee results. Both documents stress competency-based assessment and both recognise that the quality of questions decides whether it happens. NCF-SE 2023 gives a whole section to designing good questions and notes that "designing good questions is a skill that is built over time with practice" (NCF-SE ,2023, p. 102). OBE depends on exactly this condition.

Skills Developed through Open-Book Examination

Open-book exams use skills that recall-based exams leave unused. The first is finding and evaluating information.

Students need to know how their textbook is organised, spot the relevant section and judge whether a passage actually answers the question. These are basic forms of information literacy that later study and work depend on them.

The second is application and transfer. Since the facts are on the page, marks go to using them in an unfamiliar situation: interpreting a data table in science, applying a constitutional provision to a case in social science, or using a grammar rule in a new context. NCF-SE 2023 calls this the ability "to process or use available information and apply the same in various contexts" (NCF-SE, 2023, p. 102).

Third comes analytical writing. Open-book questions usually ask students to compare, justify or argue, so an answer has to join evidence from the material with the student's own reasoning. Paraphrase and summary take the place of reproduction.

OBE also builds organisational and self-regulatory habits. Well-prepared students make indexed notes, mark key pages and spread their reading across the term instead of cramming before the test (Theophilides & Koutselini, 2000) [27]. In the examination itself they must decide how long to spend searching and when to write from understanding alone. Such decisions draw on metacognition, an awareness of what one knows and what one needs to look up. Regular open-book tasks can also make students more at ease with informational texts; CBSE's OTBA was built around case studies and passages that students had to interpret (CBSE, 2013).

Advantages and Limitations

1. Advantages

The main advantage of OBE is that it changes what students and teachers prepare for. Once recall carries fewer marks, guidebooks and memorised model answers lose much of their value, and classroom time can shift towards explanation and problem solving. Teachers in the CBSE pilot were optimistic that open-book assessment could foster critical thinking (Shukla, 2025) [25], and participants in Sakshi and Devi's (2025) [22] study described a gradual move towards understanding the logic of ideas.

OBE also lightens the burden of memorising peripheral facts, which NCF-SE 2023 identifies as a source of examination stress (NCF-SE, 2023, pp. 107-108). It is closer to the way knowledge is used outside school, and it shows teachers more clearly whether students can apply concepts. Students who understand a topic but struggle to retrieve details under pressure get a fairer chance to show what they know. Figure 1 summarises these benefits.

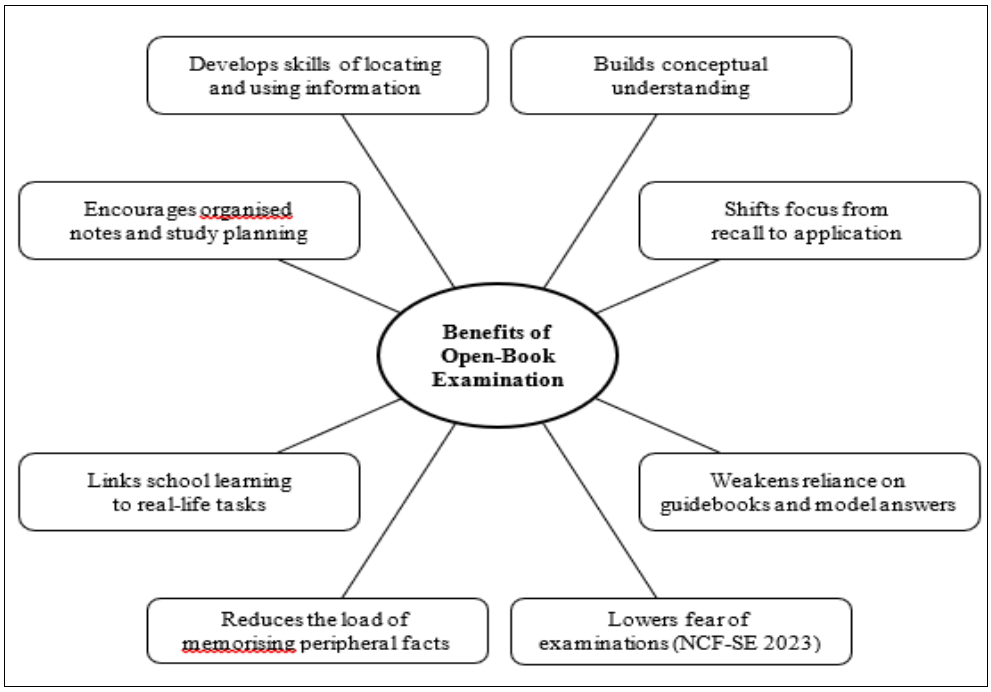


Fig 1: Benefits of open-book examination in school education

2. Limitations and challenges

Question design is the hardest part. Items that cannot be answered by copying, that match the syllabus and that suit the students' age take time and skill to write. Many teachers had little training in this, and teacher readiness was among the barriers reported from CBSE schools (Sakshi & Devi, 2025) [22].

Then there are student misconceptions. Students who think an open-book test is easy may prepare less and Durning *et al*. (2016) [10] noted that students may prepare more extensively for closed-book examinations. In the CBSE pilot, scores ranged from 12% to 47%, which the Board read as difficulty in using resources and grasping concepts (Shukla, 2025). Students who do not know their books lose time searching, and some leave answers unfinished (Saxena, 2026) [23].

Retention and equity raise further concerns. If open-book tests replace closed-book ones altogether, students lose the retrieval practice that supports long-term memory (Agarwal & Roediger, 2011; Permzadian & Cho, 2025) [2, 20]. Unrestricted formats favour students with better books, notes or guides, a risk that grows in rural and under-resourced schools. Open-ended answers are harder to mark consistently, and NCF-SE 2023 already notes that many test instruments lack clear marking schemes (NCF-SE,2023, p. 108). Parents used to memory-based examinations may doubt that a test with books allowed is a serious one. Figure 2 shows these challenges.

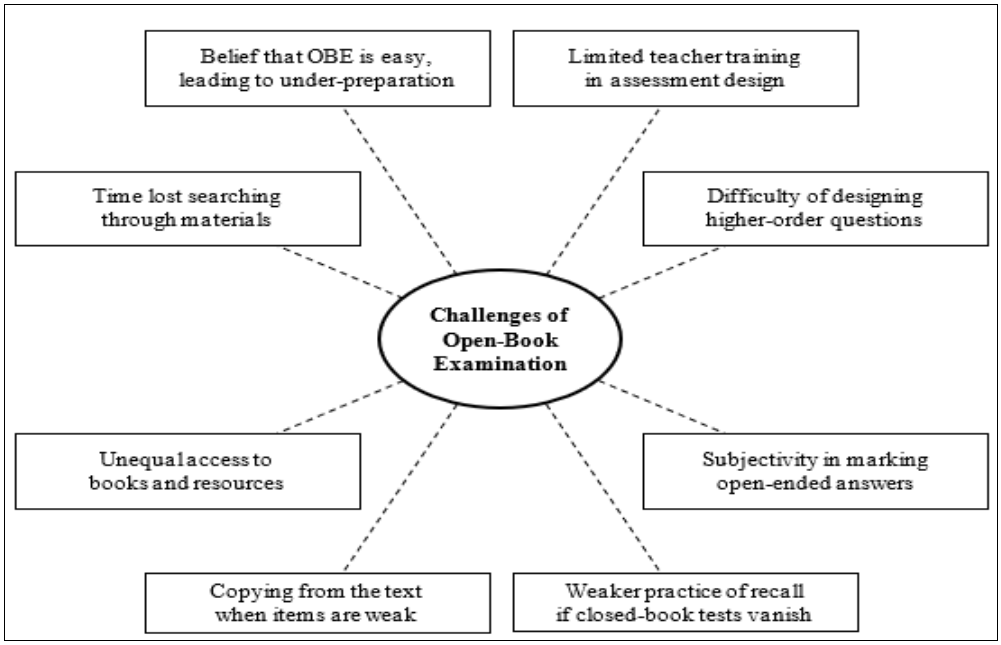


Fig 2: Challenges of open-book examination in school education

Indian Experience

1. Higher education

Even before the pandemic, in 2019, the All India Council for Technical Education had permitted open-book examinations in engineering colleges (Saxena, 2026) [23]. The University of Delhi held online open-book examinations during the 2020 lockdown (Ashri & Sahoo, 2021) [4], and several central universities and IITs used open-book or open-resource formats in the same period (Saxena, 2026) [23]. Much of this was a response to emergency conditions rather than a planned reform, and it happened largely online.

2. CBSE Open Text-Based Assessment, 2014 to 2017 [12]

CBSE announced OTBA in Circular No. Acad-39/2013, dated 31 May 2013 (CBSE, 2013) [8]. From March 2014 it applied to all main subjects in Class IX, as part of Summative Assessment II, and to Economics, Biology and Geography in Class XI, as part of the annual examination. Schools received the text material and case studies in December 2013 [8], and the same material was reprinted in the question paper for students to refer to while answering. OTBA carried 15 to 20 percent of the marks in the subjects concerned. Its stated aim was to "incorporate analytical and theoretical skills, thus moving away from memorization".

On 1 February 2017, CBSE withdrew OTBA from the scheme of studies in Classes IX and XI from 2017-18 session, citing the "modicum partial attainment of desired objectives of OTBA" and feedback from stakeholders (CBSE, 2017). The notification does not say which objectives fell short, and no detailed evaluation seems to have been published, so the reasons can only be inferred. Two design features may have mattered. Because the material was released months in advance, it could be studied and summarised like any other text. OTBA also made up a small share of marks inside a largely closed-book system. Under those conditions, students and teachers had little reason to change the way they prepared.

3. Open-book assessment for Class 9 from 2026 [11]-27

Meeting in June 2025, the CBSE Governing Body approved Open-book assessment for Class 9 from 2026 [11]-27 session, in line with NCF-SE 2023 (Shukla, 2025). The scheme covers Languages, Mathematics, Science and Social Science and forms part of the three pen-and-paper assessments held each term. It followed a pilot study built on cross-cutting curricular themes, with no additional reading material. Pilot scores ranged from 12% to 47%, which the Board put down to difficulty in using resources and understanding concepts, while teachers supported the idea and stressed the need for structured guidance (Shukla, 2025). The Board plans standardised sample papers and a framework for schools, and participation is reported to be unlikely to be mandatory (Eastern Mirror News, 2025).

Unlike OTBA, the new scheme places open-book tasks within school-based internal assessment, and its pilot did not rely on texts released in advance. The pilot scores also make it plain that open-book assessment is no easy option. Students who have spent years preparing by memorisation need time and instruction before they can use a book well against the clock.

Suggestions for Implementation

Examining bodies and policy makers first need to make clear what OBE is and what it is not. Boards should publish sample papers with items at different cognitive levels, lists of permitted materials and marking schemes for open-ended answers. Open-book components belong within a mixed assessment plan that keeps closed-book items for core knowledge. Every student should have the same material, which in practice means the prescribed textbook or a supplied text, so that results do not depend on what students have at home. Schools that adopt OBE should report how it worked, and boards should commission independent evaluation from the start instead of after withdrawal, as happened with OTBA.

Most of the practical work falls to schools and teachers. Teachers need training in writing open-book items, in using blueprints that fix the cognitive level of each question and in preparing rubrics. Moderation within departments, where teachers review one another's items and mark sample scripts together, can make marking more consistent. Class tests and periodic assessments are the best place to start, since the

stakes are low and teachers can learn from how students respond.

Students need to be prepared explicitly. They should be shown how their textbook is organised, how to make indexed notes and how to plan time in an open-book test, which includes answering what they know before searching for the rest. Mock tests followed by a discussion of how students found and used information make these skills visible. Parents, too, should be told why books are allowed and what kind of thinking the questions demand.

Teacher education has a part to play as well. Pre-service programmes such as the B.Ed. and the Integrated Teacher Education Programme can teach assessment design that goes beyond recall, with practice in writing and reviewing open-book items. In-service training under existing professional development programmes can do the same for practising teachers. Figure 3 groups these best practices into three areas, and Figure 4 lays out a phased strategy for a school moving from closed-book to mixed assessment.

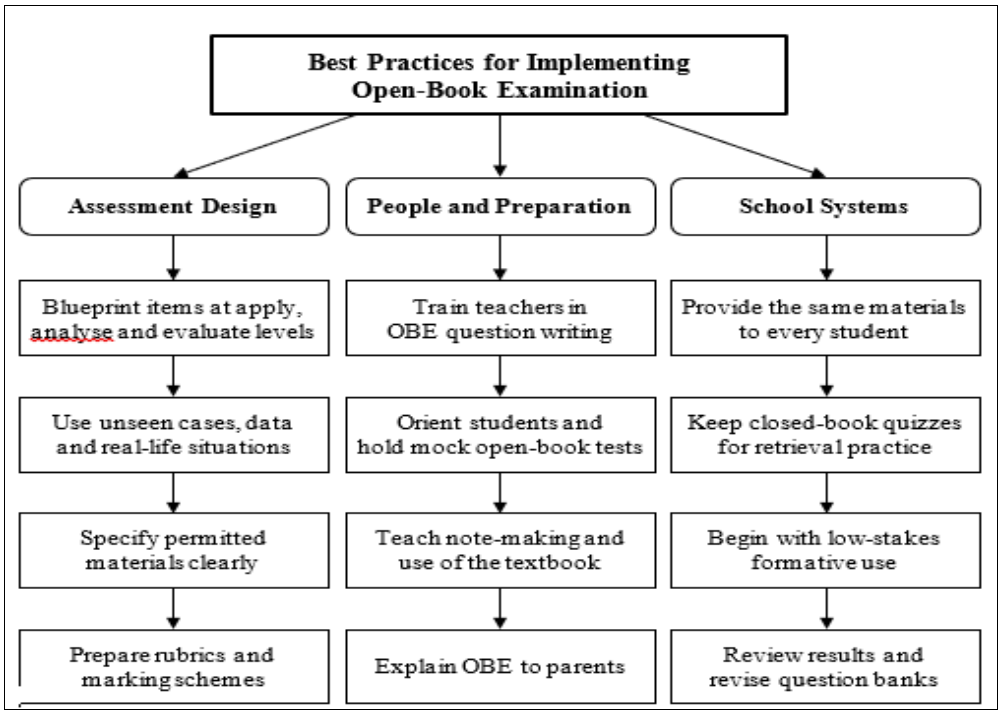


Fig 3: Best practices for implementing open-book examination in schools

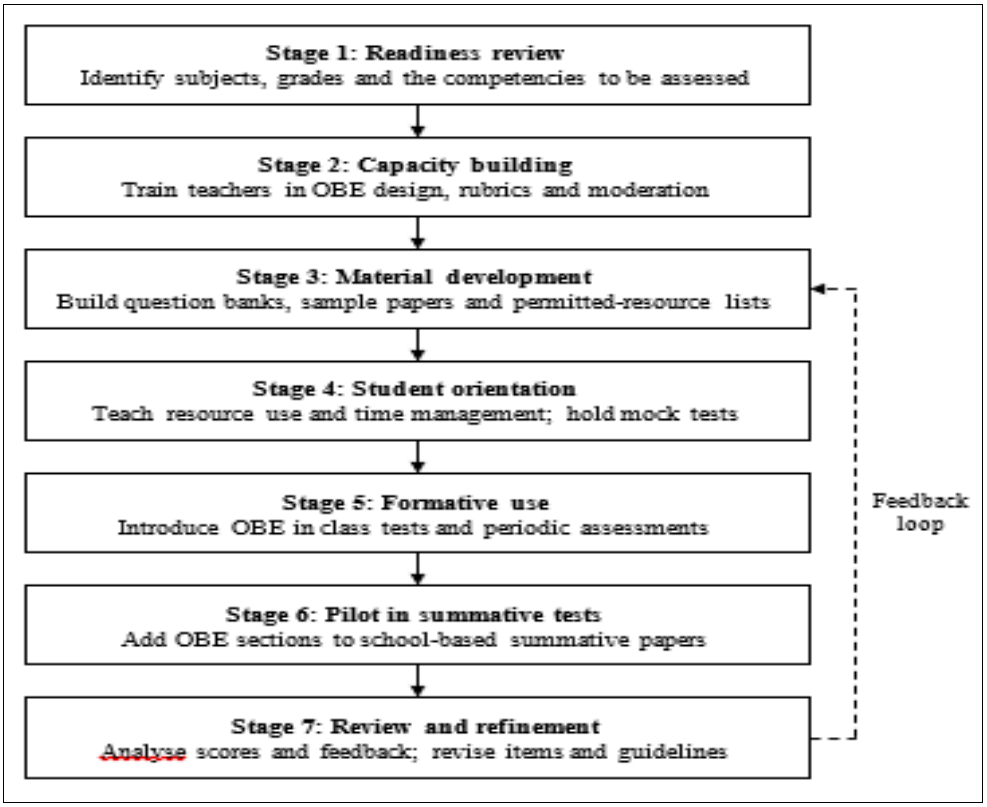


Fig 4: Phased strategy for introducing open-book examination in a school

Conclusion

Open-book examination addresses a specific problem in Indian school education: examinations that reward recall have shaped teaching and learning around it. NEP 2020 and NCF-SE 2023 both call for assessment of understanding, application and reasoning and NCF-SE 2023 names open-book tests as one way of getting there. The format is grounded in the revised Bloom's taxonomy and in constructivist and authentic approaches to learning

It can also develop skills that closed-book papers leave unused, including finding and judging information, applying concepts to new situations and organising one's own study.

The format also has clear limits. OBE works only with questions that cannot be answered by copying, teachers able to write them and students who know how to use their books and materials available equally to all. Closed-book assessment still has a place, especially for knowledge students must carry in memory. The withdrawal of OTBA in 2017 shows what happens when the format arrives without these conditions and the low scores in the 2025 pilot show that students need preparation for it. With open-book assessment returning for Class 9, schools have a second chance. Its success will depend less on the decision to open the book than on the care taken over what students are asked to do with it. Empirical studies in Indian classrooms, across subjects and types of school, are needed to show how the format works in practice.

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