

# Assessment for competency based education at Standard X

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This is a summary of the final report that was submitted to the British Council by UK NARIC, the National Recognition Information Centre for the United Kingdom, which is the national agency responsible for providing information and expert opinion on qualifications and skills worldwide.

The report was submitted in November 2020.



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# What is the purpose of the report?



On behalf of the British Council of India, UK NARIC was commissioned to conduct a review of the CBSE Standard X framework and provide an assessment of readiness for competency-based education (CBE).

The final report reviews and identifies the scope for competency-based approaches to be integrated, considering the overall implications on the assessment system and in relation to selected international assessment frameworks.

The report is part of the first stage under the CBSE competency-based education project which aims to strengthen the capacity of the education system to deliver high-quality competency-based learning and assessment for science, maths and reading at secondary school level.

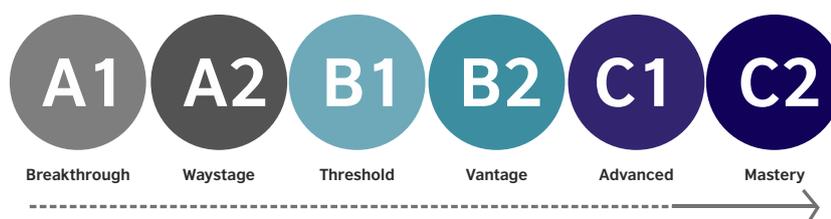
# What is competency-based education (CBE)?

There is no single global definition or unifying framework for CBE. However, an overarching principle is that competency-based education focuses on the student's demonstration of learning outcomes as central to the learning process.

There is also a focus on attaining proficiency in particular competencies to facilitate progression.

Self-paced, individualised learning is a further common theme as is the emphasis on the authenticity of the learning experience and real-world applications of knowledge and skills. Central to all definitions is the goal to empower students, providing a meaningful and positive learning experience.

Competency-based education within the context of languages is best articulated in the Council of Europe's Common European Framework of Reference for Languages, the CEFR<sup>1</sup>. Proficiency is described on a six-point scale which provide statements of what a language user can do at each of the levels: A1 (Breakthrough), A2 (Waystage), B1 (Threshold), B2 (Vantage), C1 (Advanced), C2 (Mastery).



A useful working definition of high-quality CBE in the context of K12 education is that developed by the Aurora Institute:

- “Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.
- Assessment is a meaningful, positive, and empowering learning experience for students that yields timely, relevant, and actionable evidence.
- Students receive timely, differentiated support based on their individual learning needs.
- Students progress based on evidence of mastery, not seat time.
- Students learn actively using different pathways and varied pacing.
- Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.
- Rigorous, common expectations for learning (knowledge, skills, and dispositions) are explicit, transparent, measurable, and transferable.”<sup>2</sup>

## 1

CEFR framework. Published by the Council of Europe. Available at <https://www.coe.int/en/web/common-european-framework-reference-languages/home>

## 2

Competency Works, 2019. What is Competency-based Education - An Updated Definition. Published by: Aurora Institute. Available at: <https://aurora-institute.org/wp-content/uploads/what-is-competency-based-education-an-updated-definition-web.pdf>

# What are higher order thinking skills?

These skills are designed to stretch secondary level students to develop the cognitive skills needed for progression to studies at a more advanced and to prepare them for the workplace.

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# What does competency-based education look like?

## Curriculum design

A core principle in the design of CBE curricula is that it should be grounded in real-world contexts covering topics with relevance to employment and daily life. Therefore, there is an emphasis on integrating higher order thinking skills, incorporating an interdisciplinary approach (linking within and between subjects), and including a focus on problem solving using learnt skills and knowledge. Subject content and developing mastery of the prerequisite knowledge remain key components of curriculum design.

There has also been a focus on integrating 21<sup>st</sup> century skills within secondary level qualification design, with explicit links to core skills such as numeracy, literacy and social and emotional skills development as well as global citizenship and developing global literacy to enable learners to be competent not only in the national context but also in the international labour market.

## Teaching and learning

A general principle of CBE-oriented delivery comprises student-centred learning, with a focus on the teacher empowering the students to learn actively supported by feedback. Whilst traditional methods have emphasised the role of the teacher as the imparter of knowledge, and subsequently place emphasis on lecturing, dictation and drilling as techniques of classroom delivery, CBE seeks to place

the student at the centre and actively engage the student in the learning process. CBE delivery is facilitated by the development of lesson plans based on learning outcomes and sharing learning outcomes with students at the outset to ensure mutual understanding of expectations. The use of formative assessment, particularly elements of peer and self-assessment, are key characteristics of competency-based approaches, where students are encouraged to reflect on their own work and identify areas for improvement

### Assessment

Robust and valid assessment, allowing for evaluation of the full range of learning outcomes can be considered a core feature of good practice in CBE summative assessment. Data driven, CBE-oriented summative assessments should accurately gauge the extent to which the student can demonstrate the learning outcomes, including the key skills and knowledge on completion of the programme.

Assessing the application of knowledge and skills to real-world contexts and using authentic problems which draw on real-life data are key features of CBE assessment systems concerned with real world performance. Synoptic assessment is a further key feature of CBE. This encompasses the use of assessment tasks and questions which seek to assess multiple learning outcomes and/or topic areas from across the curriculum.

Competency-based assessments should be designed to be equitable<sup>3</sup>, enabling evaluation of a wide range of ability levels of the target group of students, which at secondary level comprises a countrywide cohort aged 15 and 16. Maintaining a balance between accessibility on the one hand and providing opportunities to demonstrate higher order thinking skills on the other is one of the aspects to consider in designing competency-based secondary school level assessments.

### 3

Aurora Institute, 2017. How Systems of Assessment Aligned with Competency-based Education can Support Equity. Published by: Aurora Institute. Available at: <https://aurora-institute.org/wp-content/uploads/how-systems-of-assessment-aligned-with-competency-based-education-can-support-equity-jan-2020-web.pdf>

# What did the UK NARIC team do?

**The UK NARIC collected the following data for analysis:**

**Site visit (2 March to 6 March, 2020):**

Meetings at CBSE offices and visits to five schools. Focus groups held with students, teachers, principals, CBSE subject experts and meetings with the Head of CBSE, Director (Academics) and Controller of Examination. A small number of classroom observations took place.

**Online engagement (October 2020):**

Surveys of students, teachers and school management and interviews with students, teachers and principals.

**Desk-based review:**

Review of relevant CBSE materials, including the latest CBSE Standard IX and X syllabi, Sample Question Papers for 2019-2020 as well as past examination papers from 2019 and 2018.

**Case studies:**

Comparative analysis of other national and international qualifications at a corresponding level (from the UK, New Zealand, Malaysia, Cambridge International and Estonia).

**Assess readiness for CBE:**

Assessment, based on best practice CBE design principles in terms of curriculum design, assessment and delivery, of the current level of integration of competency-based practices in CBSE Standard X.

The full report and appendices analyse the data, highlight the strengths of the current frameworks and provide recommendations for development in line with a CBE approach.

# What are the key challenges?

The key challenges to implementing reform are identified as follows:

## Challenge 1

Perceived resistance to CBE approaches from subject experts / item writers / paper setters.

## Challenge 2

Variation in teacher mindset and perceived resistance of teachers and parents to competency-based approaches.

## Challenge 3

Current capacity of Standard X teachers to provide outcomes-based delivery, reflecting current and past limitations in the teacher training system.

## Challenge 4

Broad spectrum of school and student backgrounds, needs and abilities.

## Challenge 5

Perceived variation in teachers' marking practices in the absence of standardisation for internal assessment on a system-wide scale.

## Challenge 6

Lack of awareness and understanding among teachers, students and CBSE staff over what is meant by CBE and CBE approaches in general.

## Challenge 7

Scale of CBSE school network, assessment implementation and cohort size.

# What are the report's overarching recommendations?

A number of overall recommendations are made in the report, relating to six themes of CBE principles. The recommendations consider the Indian context, short, medium- and long-term needs and the priorities of CBSE in moving towards a competency-based approach to qualification design, delivery and assessment.

It is understood that some of the changes discussed are achievable in the short term while others may involve a more incremental introduction and development over the mid- to longer term. With the CBSE timeline for introducing CBE approaches spanning five years, it is anticipated that the majority of these areas for development can be implemented given assistance in the form of training and capacity building on specific themes highlighted in the recommendations.

## Overarching theme 1: Strengthening the validity and consistency of the syllabus design

- **Recommendation 1a:** In consultation with NCERT, increase engagement with employers and universities to align curriculum content and competencies with practical workplace requirements and to facilitate flexible progression pathways for holders of Standard X
- **Recommendation 1b:** Adopt subject-specific assessment objectives / question typology, detailing the range of general skills that are applicable to the subject in question
- **Recommendation 1c:** Consider whether the competency-based model of language proficiency as developed by the CEFR may have relevance and application to the English Standard X context through

consultation with key stakeholders and field experts

## Overarching theme 2: Facilitating the validity of assessment

- **Recommendation 2a:** Consider appropriate tailored training for item writers, focusing on the following themes:
  - Accessibility, including formatting, layout and wording of questions in line with best practice guidelines
  - Use of authentic source material for scenario-based questions
  - Scaffolded questions, supported with clear instructions, to ensure clarity and accessibility yet also providing scope for assessment of higher order thinking skills and differentiation of student ability
  - Use and integration of visuals and diagrams to aid clarity, promote problem-solving and facilitate student engagement and motivation in the assessment
- **Recommendation 2b:** Compile a glossary of command words as a guide for item writers, students and teachers, to clarify expectations of questions using particular action verbs in the exam papers
- **Recommendation 2c:** Engage language consultants in the item writing and paper setting process
- **Recommendation 2d:** Consider the use of tracking databases in the development of items and paper setting
- **Recommendation 2e:** Support training, monitoring and progression, establish role profiles for item writers and paper setters with clear expectations. Supplement with

guidelines for item and paper development in line with the CBSE syllabus

- **Recommendation 2f:** Facilitate examiner reporting processes and consider publishing integrated examiner reports with item level qualitative analysis and recommendations

### Overarching theme 3: Assessment reliability and transparency

- **Recommendation 3a:** Consider tailored training for paper setters on mark scheme design and implementation to facilitate flexibility and consistency of the marking process
- **Recommendation 3b:** Consider reducing the number of question options or choice in maths and science in Standard X examinations
- **Recommendation 3c:** Provide additional guidelines and assessment criteria for internal assessment components, tailored to subject-specific and task requirements
- **Recommendation 3d:** Consider implementing external moderation quality assurance procedures for the internal assessment, in the event of considering an increase above the current 20% weighting

### Overarching theme 4: Fairness and the student experience

- **Recommendation 4a:** In relation to equity of assessment and with a view to promoting student engagement in the case of mathematics, explore the possibility of aligning standards between Basic and Standard Mathematics

- **Recommendation 4b:** Reconsider the current structure of the exam papers, particularly those in maths and science, increasing the scope for flexibility of question type and mark allocation throughout the papers

### Overarching theme 5: Enhancing teacher and student support

- **Recommendation 5a:** Build a databank of competency-based questions as an internal and external resource to guide item writers and paper setters
- **Recommendation 5b:** Address implementation of CBE on a system-wide level, providing support and guidance documentation to teachers and students through:
  - A teacher guide to facilitate understanding of changes to assessment and guidance on how best to prepare students
  - A student guide, written to set out expectations and talk the student through the main types of questions included in the exams

### Overarching theme 6: Developing Pedagogy

- Approaches to competency-based teacher training could be adopted to place more emphasis on collaboration between teachers, peer reviews and observations as well as self-reflection

# What are the key findings of the report?

CBSE has taken preliminary steps to move towards a more competency-oriented format of syllabus design and assessment, although there are a number of identified areas for further development required to enable full integration of CBE practices.

Below is a table summarising CBE integration, according to the design principles identified:

## Summary of analysis of CBSE examination system and current level of integration of competency-based approaches

Key CBE Design Principles	Key CBE Design Principles
<b>Curriculum Design</b>	
1. Clearly defined aims and objectives	Partial
2. Learning outcomes focused	Limited-Partial
3. Relevant depth and breadth of content	Partial
4. Inclusion of transferable skills / general skills across academic subjects	Partial
<b>Assessment</b>	
1. Promoting equity and inclusivity	Partial
2. Accessibility of the assessment	Limited-Partial
3. Higher order skills-based assessment	Partial
4. Real-world relevance of the assessment	Limited-Partial
5. Synoptic and interdisciplinary assessment	Partial
6. Assessment reliability	Partial
7. Validity of assessment	Partial
<b>Teaching and Learning</b>	
1. Learning outcomes-focused delivery	Partial
2. Interactive teaching	Limited-Partial
3. Self-paced, individualised learning	Limited
4. Activity-based learning	Limited-Partial
5. Higher order thinking skills development	Limited
6. Appropriate formative assessment methods and feedback	Limited

### **Building employability skills**

While the strong theoretical content base was observed to be a strength of the CBSE syllabus in preparing students for further, more advanced level study, greater engagement with employers in syllabus review and development could be of value. This acknowledges that the aim of CBSE Standard X is not only to facilitate progression but also to build employability skills. In mathematics and science, CBSE may want to consider whether allowing some use of calculators could be beneficial, noting that in the international syllabi and assessments reviewed, calculator use enables novel and extended problem-solving in real-world situations. For students taking Basic Level maths, who do not necessarily require maths for academic progression, it would be worth considering whether the assessment could have a stronger focus on practical mathematical skills and mathematical literacy required by employers. For reading, it may be worth undertaking stakeholder engagement in order to ascertain which skills may be of most relevance to the workplace context.

### **Strengthening assessment validity**

The CBSE syllabus reflects some features of an outcomes-based syllabus design. The Question Typology, for example, sets out the skills intended for assessment on a general level with associated weightings. Nevertheless, there could be scope for a closer connection between the specified skills in the Question Typology and the questions included in the board exams which would strengthen assessment validity. This could be achieved by including the subject-specific skills alongside or as part of the more general skill areas of knowledge, understanding and application. In order to facilitate a closer link between what is taught in lessons and what is assessed by CBSE, it may be beneficial to integrate NCERT learning outcomes more concretely. This would reflect the outcomes-oriented design of similarly focused international qualifications.

### **Increasing accessibility of assessment**

A key focus and challenge of international secondary level examinations design at K-10 is to achieve a balance between an accessible assessment that allows students of all abilities to feel engaged and able to demonstrate their skills and knowledge, while also ensuring that the most able students can be challenged. In CBSE maths and science, the fixed structure of the CBSE papers allows for clear student expectations and familiarity. Whilst the latest papers (2020) in science include more structured questions, there could nevertheless be scope for including a greater number of interrelated and scaffolded tasks in line with similarly focused international exams. Structured questions with interrelated sub-parts can enable more of a staged progression in terms of item difficulty, including lead-in sub-parts to questions to assess baseline knowledge on a topic area. These may help to increase students' confidence before subsequent more demanding questions or sub-parts which can then assess higher order thinking or novel problem-solving skills on the same topic area. In reading, it may be beneficial to revisit the weighting of marks in open questions. This approach could provide opportunities for students to demonstrate a wider range of competences in extended questions. This, in parallel with mark schemes which are appropriately constructed, could support the recognition of different ability levels in open answer questions.

### **Increasing clarity of papers and questions**

The design and layout of CBSE Standard X papers and questions could benefit from further review to focus on clarity and conciseness to ensure that all candidates are fully aware of question requirements. In maths and science, this could involve simplifying some of the language used and the layout of questions, greater use of instructions, diagrams and images to orient the student to promote interest and engagement while enabling more

of the candidate's exam time to be spent on problem-solving and showcasing their knowledge and skills. For reading, scaffolding through rubric, layout, and/or indicating content points for longer answer questions may increase transparency and accessibility.

### **Increasing reliability in marking**

Facilitating assessment reliability, CBSE employs step-wise mark schemes to support consistency in the marking process in maths and science. Nevertheless, more detailed mark schemes with greater guidance on how examiners should approach alternative answers could be of value. In languages, the use of analytic, skills-based marking approaches for marking writing tasks would reflect best practices used by international examination boards and provide increased opportunity to consistently test a range of relevant competences.

### **Greater focus on assessing higher order thinking skills**

CBSE has included a number of questions aimed at higher order skills in the latest version of the Standard X exams and has incorporated some real-world scenario-based questions. However, it was found that in comparison to the international examinations reviewed, a relatively smaller number of questions assess higher order thinking skills. In maths and science, CBSE assessment could benefit from more questions that assess data analysis and evaluation,

experiments, situations and phenomena outside of those included in the NCERT textbooks yet still designed to draw on the student's accumulated knowledge and concepts from the course of study. At the same time, there is clear scope to assess the NCERT taught concepts by incorporating fresh contexts and wording, visual diagrams, new scenarios using datasets and experiments to focus on the candidate's understanding, while still maintaining accessibility. The use of structured free-response questions and a wider range of command words can be recommended. In Reading, higher order thinking skills could be integrated into longer response questions, such as requiring students to weigh up the advantages and disadvantages of a topic in an essay. Literature-based questions could reduce the number of recall questions in favour of questions which focus on analytical skills such as character analysis, authorial intention or the effect of creative language choices.

### **Greater focus on communication in language assessment**

In languages, integration of a more communicative-oriented, skills-based assessment would be beneficial, mirroring the approach taken by systems which are based on the CEFR. This, for example, could involve the development of more questions which more readily assess competencies such as “reading for detail” and inferring meaning as opposed to questions which focus on recall or direct copying from the input texts.

## What do stakeholders say?

The overall findings from the engagement with students, teachers and school leaders in October 2020 support the findings of the desk-based analysis and recommendations made in the interim report. Positive feedback was obtained on the overall curriculum (its broad and relevant coverage of topics in maths, science and reading) and the assessment. In addition, there was a positive view on the inclusion of continuous assessment.

In terms of delivery, survey and interview responses support the view that teachers are implementing some CBE approaches and that they are drawing upon NCERT when planning

learning outcomes. Nonetheless, as highlighted previously in the focus group discussions, the challenges of differentiation and accounting for diversity whilst implementing a student-centred approach to learning emerge as pertinent across the subjects and stakeholder groups surveyed.

Mirroring the findings of the desk-based review, further practical and real-world linkages would be beneficial across subject areas both in the curriculum and the assessment. Surveys also highlighted the similarity of exam papers with NCERT textbook questions, informing the review of assessment reliability.

## Subject-level analysis

### Analysis of CBSE Standard X science

A review and comparative analysis of CBSE Standard X science design and assessment was conducted against four other international examinations taken at the same educational stage in different countries.

The CBSE syllabus included a range of topics in line with international curricula and included practicals and the development of students' experimental skills. Assessed skills focused on knowledge and understanding and problem solving (application) with analysis and evaluation. Like other international curricula, CBSE uses a points-based approach for marking. There is regular review of the syllabus which engages the opinions of teachers from across different types of school.

To move further towards a CBE approach and framework, the following areas could be considered:

### Increasing focus on core competences

- Increasing the number of structured questions, broken down into sub-parts which assess different but related skills and knowledge related to the topics.
- Using mathematical questions in chemistry and biology, not just physics.
- Increasing the number of questions focusing on planning, analysing and modifying experiments and making use of questions which go beyond recalling key steps in pre-assigned practicals.

### Increasing real-world relevance

- Allowing the use of calculators to allow for a much broader and more complex range of calculation problems to be set extending across biology, chemistry and physics and providing students with formulae sheets so fewer demands are made on students' ability to recall.

- Increasing the input that employers have to ensure that the curriculum subject content in science addresses the practical requirements for successful application of science skills in the workplace.

#### **Increasing the focus on higher order thinking skills**

- Increasing the number of questions focusing on higher order thinking skills assessment which require students to, for example, analyse datasets to compare and contrast, interpret and evaluate scientific data drawing on their knowledge and understanding.
- Using extended, open-answer questions to assess application and analysis in a skills-based approach, rather than using such questions to assess knowledge and understanding of textbook topics.

#### **Improving accessibility**

- Increasing the clarity of questions in terms of wording and format by, for example, restructuring questions which embed multiple tasks, simplifying sentences and showing the breakdown of marks for all question parts.
- Making use of 'ramping' to improve accessibility as this allows candidates to settle into the paper and build their confidence before attempting more difficult questions toward the end of the paper. Ramping is where questions progress in difficulty throughout the exam.

#### **Increasing validity and reliability**

- Using multiple-choice questions to assess knowledge, understanding and some application but using other question types to assess the higher order thinking skills of analysis and evaluation.
- Reducing the number of optional questions; while optionality can provide flexibility where the assessed content is particularly broad or skills-based such as in arts and languages, in content-based subjects such as science it reduces reliability.
- Increasing the clarity of guidance for examiners on how to allocate marks and how to mark alternative answers.

- Decreasing the level of predictability of questions by encouraging greater innovation in creating freshly worded questions for each sitting and providing more explicit instruction to item developers and paper setters.
- Providing documented and published qualitative analysis of each item in the CBSE review process, which could potentially explore the possible reasons for student performance on particular items.

### **Analysis of CBSE Standard X maths**

A review and comparative analysis of CBSE Standard X maths design and assessment was conducted against four other international examinations taken at the same educational stage in different countries.

The CBSE maths syllabus has clearly defined overarching aims and objectives and shares a similar focus to international assessments on the broad topic areas of number, algebra, shape and space, mensuration and handling data (statistics and probability). There has been significant progress towards developing a more outcomes-oriented qualification design for Standard X. The CBSE sub-topics were observed to go into more depth and be more theoretical than those covered in other systems at the same level.

Assessment uses a range of question types and combines questions set in a mathematical context with those which use real-world scenarios. There are two tiers of entry (Basic and Standard) and the combination of question types is similar to the international frameworks reviewed. The marking methods are fairly similar to international assessments, with a points-based approach which allows CBSE candidates to gain credit for partially correct answers or answers where they have used the correct strategy in certain steps but have given a final incorrect answer.

To move further towards a CBE approach and framework, the following areas could be considered:

### Focusing on core competences

- Increasing the emphasis on mathematical communication by expecting students to provide a full strategy and working out in response to all questions, including the short answer questions, as well as to state answers to an appropriate degree of accuracy.
- Making greater use of structured question formats (as opposed to stand-alone, multiple-choice and gap-fill questions) which allow for more flexibility in the range of skills a question can assess, including the integration of less predictable yet interconnected question sub-parts to assess application and novel problem solving.
- Focusing on students' problem-solving ability by providing a greater number of diagrams rather than having candidates construct their own which places demands on memory and visualisation.

### Increasing real-world relevance

- Engaging with employers to achieve alignment of the curriculum with employers' needs.
- Ready students for real-world application by including the topics of commercial mathematics, investigative maths, core experiments and cross-disciplinary application.
- Allowing the use of calculators and providing formulae to allow for a much broader and more complex range of calculation problems to be set which mirror real-world scenarios and prepare students for different careers involving numeracy and mathematical application for which calculator use is an expected skill.

### Increasing accessibility

- Promoting equity by overlapping the Basic and Standard tiers, using a grading system rather than percentage scores and removing reference to the tier taken on the candidate's certificate.
- Increasing the clarity of questions by using simpler language, restructuring questions



which embed multiple tasks, consistently showing mark allocations for sub-questions and using ramping to structure papers by increasing question difficulty.

- Providing diagrams for questions which have a mathematical context or real-world context rather than a text description.

### Increasing validity and reliability

- Reducing the number of optional questions; while optionality can provide flexibility where the assessed content is particularly broad or skills-based such as arts and languages, in content-based subjects such as mathematics it reduces reliability.
- Increasing the clarity of guidance for examiners on how to allocate marks and how to mark alternative approaches and strategies.
- Reducing the predictability of items by including unfamiliar and novel scenario-based questions and avoiding replication of questions from textbooks; this will also require providing more explicit instruction to item developers and paper setters.
- Providing documented and published qualitative analysis of each item in the CBSE review process, which could potentially explore the possible reasons for student performance on particular items.

## Analysis of CBSE Standard X reading

A review and comparative analysis of CBSE Standard X English language and literature design and assessment was conducted against four other international examinations taken at the same educational stage in different countries. There is also a well-established international competency-based framework for language acquisition known as the CEFR<sup>4</sup>. This framework considers an individual's language proficiency across a range of competencies, strategies and activities required to understand a language user's overall language proficiency.

The CBSE Standard X English course covers both English language and literature. The syllabus aims indicate that competency-based education is integrated into the overall design of the qualification across the four skills (reading, writing, listening, speaking). Other linguistic competencies are also covered in the aims and learning outcomes (e.g. sociolinguistic competence and mediation skills).

Assessment consists of two parts: the annual examination which is equivalent to an 80% relative weighting and an internal assessment with 20% relative weighting. The examination focuses on reading skills, writing and grammar skills and literature in a set textbook and reader. The internal assessment focuses on listening and speaking activities.

Even though the CBSE syllabus strongly values listening and speaking skills in the learning outcomes, this does not translate well in the assessment format as these skills are assessed only internally and in a non-standardised manner.

To move further towards a CBE approach and framework, the following areas could be considered:

### Aligning syllabus and assessment

- Strengthening the inclusion of competencies and ensuring that overarching course and assessment aims inform question design and that questions reflect the specific competencies that are being targeted.
- Consulting subject experts and a wide range of stakeholders to ensure the relevance and value of the competences.
- Consulting with key stakeholders and field experts to consider whether the competency-based model of language proficiency as developed by the CEFR may have relevance and could apply to the Standard X context.
- Developing learning outcomes that are measurable and linked to defined competences (as outlined, for example, in the CEFR).

### Addressing issues around accessibility

- Reviewing the design of multiple-choice questions to ensure that distractors assess appropriate comprehension of the texts and are well-constructed to test the appropriate competences.
- Ensuring that scaffolding is present in assessment design, e.g., providing an example, emphasising key instructions, providing

## 4

CEFR framework. Published by the Council of Europe. Available at <https://www.coe.int/en/web/comm-on-european-framework-reference-languages/home>

content points and giving an indication of mark allocation.

- Conducting proofreading, item writer training and piloting to acquire feedback that results in actions such as problematic questions being removed or redesigned.

#### **Increasing practical, real-world skills coverage**

- Reviewing the weighting of questions or question types to provide more opportunity for students to demonstrate detailed understanding of texts (e.g. reducing the number of recall questions, increasing the points available on an extended question).
- Reviewing item wording and design to ensure that the questions are focused on assessing reading comprehension and cannot be answered with techniques such as word spotting and copying phrases word-for-word.

#### **Giving greater weight to higher order thinking skills**

- Allocating more marks to the literary analysis questions and supporting these with a clear mark scheme to draw out the specific competencies.
- Including an unseen text to reduce predictability. This ensures that students' understanding of literary features, effects and intentions is assessed rather than their ability to memorise such features.

- Including an essay style question to allow students to demonstrate their ability to develop arguments and justify a position; additionally linking this to a key 21<sup>st</sup> century topic area, such as environmental concerns, human rights or technology, will allow students to demonstrate a range of vocabulary.

#### **Ensuring validity of assessment**

- Considering how different competences in the CBSE Standard X will be tested, how they will be weighted across the whole paper and which questions will test which competences.
- Developing detailed guidelines to support item writers' understanding of which competencies are (and are not) to be tested in their submissions.
- Reviewing mark schemes to ensure they allow sufficient reward for key competences, particularly in comparison to content points.
- Developing analytical mark schemes to ensure a balance of rewarding key target competencies across a task, and training markers to use these.
- Developing a clear standardisation process to support examiners marking open-response items.

# British Council and the CBSE-CBE project

The CBSE-CBE project was created as part of a suite of projects initiated to deepen cultural understanding between the UK and India through education programmes.

The project has been given a place of prominence by the government of India because it is deemed to be one of the projects that directly supports the implementation of the changes recommended in the National Education Policy (NEP) 2020.

The timelines of project activity were impacted because of Covid-19. Activity resumed in August 2020 and the scope and scale were amended.

## What are the objectives of the CBSE-CBE project?

The CBSE-CBE project aims to strengthen the capacity of schools to deliver high quality competency-based teaching, learning and assessment to improve learning outcomes in the school education system, particularly in science, maths and reading at the secondary level (Grades 6 to 10).

The project will set standards for test items, create assessment tools and train a cohort of test writers to generate new high-quality test items enhancing the competency-based assessment process of schools.

The project will build system capacity to manage change and improve standards systematically.

The project will do this by:

- reviewing the existing examination system and providing recommendations,
- creating competency-based assessment tools,
- training test item writers and assessment designers,

- training teachers in competency-based pedagogy,
- orienting leaders to create an enabling environment in schools,
- exploring innovation in mentoring teachers digitally,
- sharing knowledge through conferences and seminars.

## How will the project effect change in the education system?

Schools in India have a content-focused approach to learning which can encourage an excessive focus on memorisation. For students to be ready for further study and employment anywhere in the world they must be equipped with higher order thinking skills (to problem solve, analyse and evaluate) and 21<sup>st</sup> century skills (such as communicating and collaborating). A competency-based education encourages deep learning of skills and competencies that support this ambition.

The scope of the project is limited to creating a CBE framework based on NCERT learning outcomes and the current CBSE syllabi for English, science and mathematics for Grades 6 to 10. This is because implementing CBE in a large education board with a complex context would be challenging without a first phase such as this. However, the aim of the CBSE is to implement this for all subjects and all classes.

## What will the British Council provide?

The British Council will provide the following project inputs:

- Capacity building of teachers in teaching and test item writing.

- Providing teachers with resources such as high-quality question banks and sample lesson assessment frameworks for them to understand the standards and recognise good practice.
- Provide peer support through the creation of teacher action groups and interest group communities.
- Develop the capacity of mentors in specific domains through E-STAGs (virtual subject teacher action groups which create space for teachers to share and reflect).
- Create an enabling environment through wide-scale dissemination of information, creating a common vision for change for the CBSE school community, school leaders and students.
- Empower senior leadership to drive change and build their capacity to manage education system change.

### **What has been the impact of Covid-19 on the project?**

The project delivery has been impacted by Covid-19 resulting in a considerable delay. However, the lost time is being recovered by delivering most of the project operations virtually.

Our work on other online projects has shown that results, engagement and outcome can be similar to face-to-face training. There will, however, be some impact in terms of peer-to-peer learning and networking.

### **Central Board of Secondary Education**

The Central Board of Secondary Education (CBSE) is a national Board under the Ministry of Education, Govt. of India. The Board has more than 25,000 schools affiliated to it in India and overseas, in 25 countries. These include the Kendriya Vidyalayas, the Jawahar Navodaya Vidyalayas, Central Tibetan Schools, Schools run/aided by the State Governments and Private Schools. The Board's main objective is to encourage quality education focussed on holistic development of learners. It motivates schools and teachers to adopt learner centric enquiry based pedagogies and use innovative methods to achieve academic excellence. The Board is committed to providing a stress-free learning environment that will develop competent, confident and enterprising citizens who will promote harmony and peace in the world

### **British Council**

The British Council builds connections, understanding and trust between people in the UK and other countries through arts and culture, education and the English language. We help young people to gain the skills, confidence and connections they are looking for to realise their potential and to participate in strong and inclusive communities. We support them to learn English, to get a high-quality education and to gain internationally recognised qualifications. Our work in arts and culture stimulates creative expression and exchange and nurtures creative enterprise

### **UK NARIC**

UK NARIC is the designated national agency in the United Kingdom for recognition and expert advice on global qualifications and skills. Since 1997, we have performed this official function on behalf of the UK Government. The information provided by UK NARIC enables educational institutions, professional bodies, businesses, and government departments not only in the UK but across the globe to develop informed opinions and appropriate policies when considering qualifications or training systems from overseas. UK NARIC is a global reference point for qualifications and holds data on over 5,000 qualifications from more than 200 countries. UK NARIC's role and functions are vital to qualification and skills recognition, education development, and managed mobility policies in today's globalised economy

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