Central Board of Secondary Education’s (CBSE) On-Screen Marking system

Mains: *GS II | Governance & Education*

Why in News?

The CBSE's shift to Class 12 digital evaluation has sparked intense debate following critical system failures, with students reporting blurred scans, missing pages, and in some cases, they were shown other candidates' scripts.

What is On-Screen Marking (OSM)?

- On-Screen Marking, or OSM, is a ***digital evaluation system*** in which teachers assess scanned copies of answer books on a computer rather than checking physical scripts.
- Candidates continue to take examinations utilizing conventional physical answer booklets.
- Physical scripts are systematically scanned and uploaded to a secure platform.
- Uploaded booklets are automatically anonymized to prevent grading bias and digitally distributed to designated evaluators.
- The Board first explored OSM in 2014 but did not proceed because suitable scanning technology was not available.
- At the time, answer books often had to be cut from the spine before scanning, creating the risk of pages being mixed up.

Why did CBSE decide to adopt OSM now?

- **Uniformity and Security -** The primary goal of transitioning to a digital evaluation system is to make the entire grading process more uniform, highly efficient, and administratively secure.
- **Elimination of Human Error -** The Board expects that digital scripts will effectively reduce regional bias or variations in marking, while completely eliminating clerical mistakes like incorrect mark totaling.
- **Enhanced Surveillance -** The digital platform allows for real-time monitoring of evaluators, adding a strong layer of accountability.
- **Expedited Result Publication -** Because the turnaround time for grading is significantly reduced, examination boards can process the final data and declare student results much sooner.
- **Cross-Institutional Validation -** Before full-scale implementation, the CBSE conducted a comprehensive "dry run" (pilot test) to identify potential system bottlenecks.

How do examination boards abroad use digital marking?

- **Evaluation System in UK -** Major UK examination boards such as
  - Assessment and Qualification Alliance (AQA),
  - Oxford Cambridge and RSA Examination (OCR) and
  - Pearson Edexcel, conducts exams like the A-levels have used online marking for many years.
- Scripts are scanned centrally and distributed electronically to examiners.

- In some cases, examiners do not mark entire answer books; instead, they evaluate specific questions across thousands of scripts, helping improve consistency.
- In Britain, online marking was introduced primarily to improve quality control, increase efficiency and strengthen examiner monitoring.
- British system differs from many Asian examination systems because GCSE and A-level examinations frequently include long-form written responses and essays.
- Technology can help with distributing students' answers to markers and making the process more efficient.
- **International Baccalaureate (IB) -** The International Baccalaureate (IB), whose examinations are taken in more than 150 countries, also relies heavily on digital evaluation.
- Scanned scripts are accessed online by examiners around the world, while senior examiners monitor marking quality through moderation and standardization exercises.

What concerns are being raised about CBSE's rollout?

- **Hasty Implementation -** Beyond occasional technical glitches, educators question whether digital evaluation frameworks are being rushed through without adequate pilot-testing or stakeholder training.
- **Handwriting Degradation -** Upper-secondary students (Class 11 and 12) write continuously for 3 hours.
- Expecting their handwriting to remain uniformly neat throughout the script is unrealistic.
- Even with advanced Optical Character Recognition (OCR) and high-resolution scanners, variations in cursive script can lead to software misinterpretation or reading strain for the examiner.
- **Loss of Graphical Clarity -** Subjects like Geography, Biology, Physics, and Mathematics rely heavily on intricate diagrams, maps, graphs, and fine pencil work.
- These critical, non-textual components often fail to reproduce clearly on scanned digital copies, potentially penalizing students for details that are lost in translation.
- **Institutionalizing the Digital Divide -** A major systemic risk is the widening inequality between educational institutions.
- Elite private schools possess the capital to easily afford secure, high-speed scanning infrastructure and stable backup power.
- Conversely, underfunded government schools may struggle with basic hardware maintenance, erratic electricity, and poor internet connectivity, thereby institutionalizing regional and social disparities.
- **Student Disadvantage in Rural Pockets -** Students from rural or marginalized backgrounds who are unaccustomed to strict alignment margins required for seamless digital scanning might have their answers cropped or omitted during the bulk-scanning process.

Is On-Screen Marking an Efficiency Milestone or an Ethical Dilemma for Education?

- **Wealth or fairness (Digital divide) -** The new system punishes students for being poor rather than for what they know. It turns a regular exam into a test of how rich a student's school is.
- **Example:** A student in a Rural school loses marks because a cheap scanner cuts off the edges of their paper, while a student at an expensive private school gets a perfect scan.
- **Justice (Honest Grading) –** Computerised errors may ruin the basic rule of fairness. When technology fails to perform, it directly messes up students' efforts & their Future.
- **Example:** A student fails biology because their pencil drawing disappears on a blurry screen, making a correct answer look completely blank to the teacher.
- **Accountability -** Big computer mistakes make people lose faith in the school board. It feels like the board is rushing into a tech experiment using students as a testing tab without any backup plan.
- **Example:** A student logs in and is shown a stranger's exam paper, which leaks private data and makes everyone lose trust in the entire marking system.

Way Forward (Is OSM the future of evaluation?)

- **Growing Global Adoption -** Most major examination boards have integrated digital marking frameworks, signaling that technology will play an expanding role in future educational assessments.
- **Mechanical vs. Content Reform** - This technological transition optimizes the mechanics of evaluation (logistics, scanning, and data entry) rather than the core qualitative content of student assessments.
- **Augmenting Human Judgement -** Digital evaluation systems are most effective when they support rather than replace professional human judgement.
- The technology must serve as an administrative assistant to examiners, ensuring that qualitative human evaluation remains the core focus of the grading process.

References

1. The Indian Express | CBSE’s On-Screen Marking system
2. India Today | CBSE's OSM

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