

ACM IEEE Panel on Online Examinations 26 Aug 2020 @ 6 PM

Questions

2 How an open book examination helps better and improve the assessment quality.

Less pressure on time, less emphasis on memory and more emphasis on understanding

6 How the answers are evaluated if it is descriptive type

Cloud-based solutions make it easy for examiners to evaluate from anywhere;

ExamPad (Chennai-based start-up has excellent solution)

There are many online solutions (AI/ML based) Radix Learning

For programming assignments there solutions like DOMjudge

8 How to pick questions that require students understanding of the concept rather than make them browse internet during the exam.

No silver bullet

Focus on internalising the concepts

Take examples from other areas / subjects

21 Why not online classrooms be made a permanent feature of school/ college education?

They are already becoming part of higher education - NPTEL credit for example

Covid-19 is only helping its wider adoption / acceptance

24 What is the best software/technology which help in conducting open book exams

Do not expect one solution for all aspects of online exam - LMS has some tools, there are stand-alone tools; use the "best of breed"; some integrated tools might evolve in the next couple of years. Good start-up idea for students!

Online Education

Challenges in Assessments

And

Open Book Examinations

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ACM IEEE Panel Discussion

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Online examination landscape

- Nature of assessment
 - Competitive exams (JEE GATE NEAT)
 - Exams integrated into learning (Assignment, Mid Term/ End-term exam)
- Key stages
 - Evaluation unit design (questions) – individual items, assembly, single / multiple variants
 - Delivery / administration of examination – Exam Hall PC, Any device, Any location, Home, LAN / Internet, Proctoring, Fairness checking
 - Assessment (correction, grading, feedback) – Human aid (totaling, checking, tabulation, comments, sharing answer books)
 - Lot of effort goes into overcoming students actions – copying, plagiarism, impersonation, stealing, group effort, extra time..
 - Specialized areas – HSS subjects, Programs, Lab experiments
- Tools (Moodle, BigBlueButton, ExamPad, Radix Learning, DOMjudge)

Teacher-centric thoughts

- Assume trust-based environment, personal knowledge of students, enjoyable (as opposed to stressful examination process)
- Assessment to aid teaching
 - Feedback on “best answers”, “multiple solutions”, copious comments, share corrected copies individually, share solution set
- Avoid “memory recall”
 - All questions are “out of syllabus”
 - Beyond Google *Bhagawan* – Probability questions based on *Dosa & Samosa* in IITK Hostel (not easy to automate but we have million teachers in India!)
 - Individualized question paper – copy does not work, no leakage possible
- “Out of box thinking” – “Questions as answers”, students to evaluate question papers!

Conclusions

- Multiple issues are involved
- Too much emphasis goes into “delivery”, security,...technology
- Less emphasis on humans (teachers)