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I-CReST 2025:110-075 – Instructors' Views and Practices on Open-Book Examinations

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ABSTRACT

Open-book examinations (OBEs) have gained traction in Malaysian higher education as a means to promote higher-order thinking skills (HOTS) and enhance assessment quality, in line with the aspirations of the Malaysian Education Blueprint and Sustainable Development Goal 4. Despite their pedagogical potential, OBEs are often misunderstood and perceived as ineffective, primarily due to challenges in question design, varied student proficiency levels, and limited instructor training. This study explores university instructors' views and practices regarding OBEs, focusing on their readiness to develop high-quality assessment questions. Using a qualitative approach, semi-structured interviews were conducted with eight experienced instructors from Malaysian and international institutions. Findings reveal that while most instructors still prefer traditional closed-book examinations, they acknowledge the value of OBEs in encouraging deeper learning and reducing examination misconduct. However, issues such as designing cognitively demanding questions, plagiarism, and marking fatigue persist. The study highlights the need for targeted training and institutional support to bridge the gap between the theoretical benefits and the practical implementation of OBEs in higher education assessment.

Keywords: Open book examinations; higher-order thinking skills; assessments, instructors' readiness; higher education

1. INTRODUCTION

In line with United Nations Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, education systems worldwide are shifting towards more progressive and innovative assessment methods. To prepare learners for real-world problem-solving and critical thinking demands, various forms of alternative assessments have been adopted such as pass-or-fail grading, open-internet or open-book examinations, collaborative assessments, portfolios, trust-based self-certification and next-generation assessments [1]. These initiatives reflect a significant push to cultivate higher-order thinking skills (HOTS) and reduce dependency on rote memorization.

In the Malaysian context, the drive to become a developed nation is closely linked to transforming the education system. Open-book examinations have been proposed as a strategic way to enhance assessment quality, as they require students to critically engage with materials

and apply their understanding [2]. Abu Hassan et al. [3] emphasized that HOTS is central to improving educational quality. In OBEs, students are assessed not only on content knowledge but also on their ability to connect concepts, reorganize information, and demonstrate critical reasoning. Johnston and Rooney [4] noted that open-book formats promote deeper conceptual understanding when questions are well-structured, aligning with 21st-century educational goals. Despite this, Zaiful Shah and Zakaria [5] found that teachers' use of Bloom's Taxonomy remains limited, with a reliance on LOTS and HOTS tasks depending on student ability. Persistent misconceptions among students [6], [7] may reflect instructors' lack of preparation. Asmawi and Nasir [8] identified the design of varied, comprehensive questions across cognitive levels as a major challenge. Without proper training, instructors may struggle to create valid HOTS assessments. Hong et al. [9] further stressed that open-book exams must be supported by well-structured questions to promote deeper learning.

Despite growing support for open-book examinations and the integration of HOTS, many instructors still struggle with crafting high-quality, cognitively demanding questions. This gap is often attributed to limited training, misconceptions and inconsistent classroom practices. As a result, it may fall short of their intended purposes in promoting deep learning and critical thinking. Therefore, it is essential to investigate instructors' views and practices related to open-book examinations and to examine the readiness of instructors to set quality examination questions that assess higher-level thinking skills.

2. LITERATURE REVIEW

This section reviews relevant literature that provides a foundation for understanding the key issues related to instructors' views and practices towards open-book examinations.

2.1 Open-Book and Closed-Book Examinations

Open-book examinations (OBEs) promote deeper learning and higher-order thinking skills by allowing students to access external materials such as textbooks and lecture notes, shifting the focus from memorization to knowledge application and integration [10]. This aligns with the demands of 21st-century learning, which emphasizes essential skill development [11]. However, students often misjudge OBEs as easier, leading to poor preparation, ineffective strategies, and time mismanagement [12]. In contrast, closed-book exams (CBEs) are seen as better for long-term retention and discipline, though they fall short in fostering creativity and critical thinking [13].

2.2 Instructors' Views and Practices for Open-Book Examinations and Higher-Order Thinking Skills

Recent studies highlight instructors' evolving views on open-book examinations (OBEs), particularly regarding higher-order thinking skills (HOTS). Flanagan et al. [12] found OBEs promote active engagement, idea synthesis, and real-world language use aligned with HOTS. Similarly, Wiyaka et al. [14] noted that educators value OBEs for assessing conceptual clarity and linguistic problem-solving. OBEs also mirror authentic communicative scenarios, encouraging creative language use. Astrid et al. [15] emphasized the need for language assessments to move beyond recall, targeting Bloom's higher levels. However, challenges remain in ensuring fairness in large or under-resourced classes [16]. In light of practicality, studies have shown that some educators have begun designing tasks that emphasize application, analysis, and evaluation [17]. Even collaborative OBE formats have been adopted to engage in

peer discussion while solving complex tasks [18]. These practices reflect a shift in pedagogical design, where they are not merely testing tools but means to foster language learning.

2.3 Jean Piaget's Constructivism Theory and Bloom's Taxonomy

Constructivism, pioneered by Jean Piaget, highlights that learners actively build knowledge through experiences and social interaction [19], [20]. This theory aligns with the open-book examinations as they promote critical thinking, application, and real-world problem-solving rather than rote memorization. This is closely linked to Bloom's revised taxonomy, which encourages assessments across higher-order cognitive domains [21]. Constructivism not only informs how students learn, but also how educators should design assessments. Instructors who embrace constructivist beliefs are more likely to view it as a meaningful tool to develop higher-order thinking. However, effective application is essential. If poorly constructed, it may fail to engage students meaningfully. Thus, instructors' readiness, including their pedagogical beliefs, assessment literacy, and institutional support, plays a vital role in ensuring OBEs align with the constructivist principle [22].

3. METHODOLOGY

Qualitative methods were applied using in-depth interviews to answer the following research questions:

1. What are instructors' views related to open-book examinations?
2. What are instructors' practices related to open-book examinations?

The target population consisted of university instructors. University lecturers were selected because of their direct involvement in designing and conducting assessments, along with higher-order thinking skills integration at the tertiary level, due to their role in designing assessments and integrating higher-order thinking skills, including open-book examinations. Using purposive sampling, eight lecturers from various Malaysian universities, with one respondent based overseas, were chosen based on their relevant knowledge and experience.

Data were obtained via Google Meet interviews for approximately 30 to 35 minutes using open-ended questions to give them the flexibility to express their views in depth. This also enabled the researcher to explore emerging themes during the interview. To ensure content validity, the interview protocol was reviewed by two experts in the field of educational assessment and TESL. Based on their feedback, minor revisions were made, including refining the wording of certain items and improving the logical flow of the questions.

For data analysis, thematic analysis was employed, as described by Braun and Clarke [23], aligning with the participants' perceptions. Interviews were transcribed, and data were coded line-by-line to generate themes and sub-themes. These were developed based on recurring patterns and insights from respondents' responses.

4. RESULTS AND DISCUSSION

This section presents the findings of the study based on data collected through in-depth interviews from a total of eight university instructors.

4.1 Demographic Profile

This study involved eight university lecturers with diverse academic backgrounds and teaching experiences. Of the respondents, six were female (75%), and two were male (25%). The majority were Malay (88%), with one respondent being British-English (12%). In terms of academic qualification, 50% of the respondents held PhD (n=4), while the remaining 50% held Master's degrees (n=4). The respondents' lecturing experience ranged from 9 to 25 years, with an average of approximately 17 years of experience in higher education. The mix of gender, ethnicity, qualification and years of service provides a balanced and insightful range of perspectives across various levels of academic maturity and institutional exposure.

4.2 Research question 1: What are instructors' views related to open-book examinations?

Three main themes were identified that relate to the instructors' views (i.e., preferences for OBEs, test quality, ease of examination administration. The first theme is "Preference for OBEs," which is divided into three sub-themes: preference for OBEs, CBEs or both. Most of the interviewees, six out of eight, preferred closed-book examinations (CBE). One interviewee preferred both types, while only one favoured open-book examinations. Those who preferred CBE said OBE is more time-consuming, as instructors need to assess students' application of knowledge, opinions, and critical thinking, which takes longer to evaluate. One interviewee also mentioned feeling more confident using CBE, as it reflects what students have truly learned without relying on reference materials.

On the other hand, the one instructor who preferred OBE believed that it encourages students to think beyond the classroom and promotes critical thinking. Below are two excerpts from interviewees who preferred CBE and OBE.

Prefer OBE (Views)	"So, for me provide them by, by giving them subjective question using open book examination allowed them actually to explore beyond the classroom." (Interviewee 5)
Prefer CBE (Views)	"I think the traditional form of assessment is good enough because when you say examination, it really measures your understanding, your knowledge, your own capacity or capability during that time, during the test" (Interviewee 6)

The second theme is "Test Quality," which is divided into two sub-themes: (1) OBE improves test quality, and (2) OBE does not improve test quality. Most of the interviewees, five out of eight, agreed that open-book examinations improve the quality of assessments. One interviewee explained that OBE allows students to provide a variety of answers that are not found in standard answer schemes but are still correct. Another stated that OBE helps students gain deeper knowledge and develop critical thinking skills. A third interviewee added that to improve test quality, instructors must carefully design higher-order thinking questions, which requires more planning and creativity.

In contrast, one interviewee disagreed and believed OBE does not improve test quality. This interviewee argued that if OBE truly enhanced the quality, then the test would have been originally designed that way. Below are two excerpts from the interviewees that support this theme:

Improve Test quality (Views)	"Yes. I think it improves the quality of the questions because, the lecturer itself has to really think, you know, like how can we, we create questions without having the, uh, without giving them the opportunity to directly find the answers from the book. We don't want them to find answers in the book. We just want them to use it as a reference." (Interviewee 3)

> "Okay. Yes. I am highly agreeing, uh, with that. Yeah. The test quality will be improved with this format, actually. Okay. We can test the student performance to be more critical in answering the question, not just memorizing the fact." (Interviewee 4)

Another theme related to instructors' views on open-book examinations is the "Ease of Examination Administration." This theme is divided into two sub-themes: (1) OBE is easier to administer, and (2) CBE is easier to administer. Out of eight interviewees, only two felt that OBE is easier to manage. Both agreed that OBE reduces the need for strict monitoring during examinations. Instructors do not have to constantly check whether students are cheating or hiding unauthorized notes. Below are two excerpts from the interviewees that support this theme:

OBE is easier to administer (Views)	"Open is easier lah, we don't need to— we don't, you know, make sure they are not cheating" (Interviewee 7)
CBE is easier to administer (Views)	"Close test because easier means, uh, we check within the timeframe given." (Interviewee 8)

All in all, the findings show that although instructors acknowledge the pedagogical benefits of open-book examinations, such as fostering critical thinking and improving test quality, many still favour closed-book formats due to concerns over practicality, grading workload, and perceived authenticity in assessing student learning. Although OBEs enhance the quality of assessment questions and reduce monitoring during examinations, these advantages are outweighed by the practical challenges of implementation. This suggests that for OBE to gain wider acceptance, institutions must provide support in terms of design training and workload management. Ultimately, the successful implementation of OBE may depend less on its theoretical advantages and more on how effectively these challenges are addressed in practice.

4.3 Research question 2: What are instructors' practices related to open-book examinations?

Three main themes were identified that relate to the instructors' practices, which are (1) Experience in Conducting OBE, (2) Obstacles in Conducting OBE, and (3) Initiatives to Overcome Those Obstacles. The first theme, "Experience in Conducting OBE," is divided into two sub-themes: (1) Have experience conducting OBE, and (2) Only invigilated OBE, with no experience conducting it. The majority of the interviewees, six out of eight, clearly stated that they have experience conducting OBE for their courses. The remaining two said they had only invigilated OBEs but had not conducted one themselves. One of them explained that the subject they teach does not require a final examination, hence does not require the implementation of OBE.

Furthermore, the next theme is "Obstacles in Conducting Open-Book Examinations," which is divided into four sub-themes: (1) Difficulty in Constructing Questions, (2) Students' Difficulties in Answering Questions, (3) Dealing with Plagiarism, and (4) Marking Becomes Tedious. For the first sub-theme, difficulty in constructing questions, two interviewees shared that it was challenging to design higher-order thinking questions that truly assess students' understanding, especially ones that cannot be easily found or copied from the Internet. Below is an excerpt from one of the interviewees that reflects this challenge:

Difficulty in constructing questions (Practices)	"Uh, the most difficult part is to create the subjective question. Okay. We need to construct the question in which the answer couldn't be taken straight from the book or the lecture notes." (Interviewee 4)"

Following this, the next two sub-themes under the obstacles in conducting OBE are students' difficulty in answering questions and dealing with plagiarism. These obstacles mainly reflect students' attitudes and behaviour when responding to OBE-style questions. One interviewee noted that students often struggle to answer OBE questions and have difficulty locating the right information. This struggle can lead them to rely heavily on open-source materials, which sometimes results in plagiarism. For the plagiarism sub-theme, three interviewees highlighted that students tend to copy content from the Internet during OBE. This issue compromises the credibility of the assessment and defeats the purpose of using OBE to promote higher-order thinking skills. The final sub-theme, marking becomes repetitive, was mentioned by one interviewee. They shared that the marking process was tedious and unpleasant, as OBE required them to spend extended hours at the computer. Below are several excerpts from the interviews that support this theme:

Dealing with plagiarism (Practices)	"I think student always have a problem because if, for example they do not really understand the objective of the subject. They are going to struggle to look up for the answers because open examination there's no definite answer that is expected." (Interviewee 5)
	"I face a problem where, uh, students simply answer, students simply, uh, uh, put the, or, or, or copy okay the answers from the, uh, textbook or form notes or from the, uh, uh, the materials" (Interviewee 8)
Marking becomes repetitive (Practices)	"But marking becomes quite a boring, repetitive, annoying, um, procedure. It becomes really fairly annoying. And if you are forced to be on a computer the whole time. Then that can be annoying." (Interviewee 2)

The third theme under instructors' practices related to OBE is "Initiatives to Overcome Challenges," which is divided into three sub-themes: (1) Getting Proper Training, (2) Strict Observation, and (3) Creating Questions that Test Various Types of Knowledge. The first initiative was mentioned by two interviewees. They believed that attending training sessions helps instructors gain a clearer understanding of how to design effective open-book questions. With proper guidance, they can conduct OBE more confidently and reduce common issues. This also allows them to better prepare their students on how to approach and answer such question formats. One interviewee stated that cheating could be prevented under strict observation or monitoring from the lecturers and the other one mentioned that lecturers must create questions that test students' application knowledge aside from theoretical and fundamental knowledge. Below is an excerpt from one interviewee under the sub-theme "Getting proper training."

Get proper training (Practices)	"I think the main thing is LOTS and HOTS. I think lecturers in the education faculty should go for training to know all about the subjects etc." (Interviewee 6)

Regarding their practices, most instructors have experience conducting OBE for their courses. However, they encounter several challenges, including difficulty in designing questions, student plagiarism and a tedious marking process. Although all eight instructors are

experienced university lecturers, the findings reveal a need for further development, especially in terms of receiving proper training on how to effectively conduct OBE to help them improve their assessment practices and better support their students. The findings highlight a gap between the conceptual benefits of OBE and the support system currently in place to implement it effectively. Institutions must go beyond policy endorsement and provide concrete support to empower educators to make more informed choices about assessment formats and foster authentic professional skills.

Although instructors acknowledge the pedagogical value of open-book examinations in promoting critical thinking and improving assessment quality, most still favour closed-book formats. This reflects a tension between pedagogical ideals and practical realities, as this preference may be attributed to familiarity, perceived ease of control, and longstanding institutional norms that favour traditional assessment methods [24]. Some instructors expressed confidence in CBEs as a more reliable way to gauge students' understanding without the influence of external sources, viewing OBEs as more suitable for exploratory or reflective learning tasks. This contrast in preferences mirrors findings by Ye et al. [10], who observed that while OBEs encourage broader thinking, many educators remain hesitant due to concerns about control, assessment consistency, and academic integrity. Conversely, those who favoured OBEs believed they better supported student autonomy and deeper cognitive engagement.

In practice, it is reported that the main challenges include designing higher-order thinking questions, managing plagiarism, and dealing with laborious marking. These findings align with Eldeeb and Sharakumari [25] and Aziz et al. [6], who argue that without strong assessment literacy, OBEs risk becoming ineffective. Kang and Lam [26] further added that it also encompasses knowing how to interpret student responses and provide feedback to ensure effectiveness. Despite being experienced educators, the instructors expressed a need for training to improve their practices with OBEs. This highlights that transitioning to more meaningful assessment methods requires not just willingness, but structured support and institutional investment [7].

5. CONCLUSION AND RECOMMENDATIONS

In a nutshell, this study highlights a disconnect between the pedagogical potential of open-book examinations (OBEs) and their practical implementation in higher education. While instructors recognize the potential of OBEs to promote higher-order thinking skills, practical challenges and limited formal training persist. This suggests that experience alone does not guarantee quality assessments without strong assessment literacy. Aligned with constructivist principles, OBEs support active and meaningful learning, however, their effectiveness depends on structured professional development, clear implementation strategies and support systems. To bridge the gap between theory and practice, institutions must invest in faculty readiness and sustainable assessment reforms.

Nonetheless, this study is exploratory and not generalizable to a larger population. This study only covered a surface-level exploration of the topic. Future research should explore scalable training models and examine students' perspectives to ensure OBEs truly align with the constructivist goals in diverse contexts.

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