

# Proctor Application Benefits in Post Pandemic Online Test Implementation

Ervina CM Simatupang<sup>1\*</sup>, Puspita Sari<sup>2</sup>, Hero Gunawan<sup>3</sup>

<sup>1-3</sup> English Department, Faculty of Humanities, Universitas Widyatama, Bandung, Indonesia

\* [ervina.simatupang@widyatama.ac.id](mailto:ervina.simatupang@widyatama.ac.id)

## Abstract

Proctor applications have emerged as a safeguard for maintaining the integrity of online assessments. One of the foremost advantages is their ability to deter cheating and academic dishonesty. By employing features such as live video monitoring, screen recording, and AI-driven behavior analysis, these applications provide a comprehensive means to ensure that students' performances are genuine reflections of their knowledge and abilities. This not only upholds the credibility of the evaluation process but also instills a sense of fairness and equity among test-takers. The result of this research, proctor applications have effectively transcended the limitations of physical invigilation. A significant proportion of participants (approximately 55%) indicated that they perceived no substantial difference in the level of confidence between the two assessment approaches. Moreover, a majority of respondents (around 45 %) Geographical barriers are rendered inconsequential as students can undertake assessments from remote locations without compromising test security. This inclusivity expands educational opportunities, particularly for individuals who may have previously encountered difficulties in attending on-site examinations. The flexibility offered by proctor applications is another pivotal advantage. Institutions can conduct tests at different times, catering to diverse schedules and time zones. This flexibility not only accommodates students' varying circumstances but also minimizes technical glitches by alleviating the strain on servers during peak usage periods.

**Keywords:** *proctor, benefits, online test*

## Introduction

In recent years, the landscape of education has undergone a remarkable transformation, with the rapid integration of technology into various aspects of teaching and learning. One of the most notable shifts has been the surge in online education, accelerated by the unprecedented global pandemic that compelled educational institutions to swiftly adapt to remote modes of instruction and assessment. As a result, the traditional paradigms of in-person testing have given way to innovative approaches that harness the potential of digital tools and platforms. A significant development within this realm is the utilization of proctoring applications in the implementation of online tests, aiming to ensure the authenticity, security, and integrity of remote assessments in the post-pandemic era. The advent of proctoring applications has ushered in a new era of online testing, characterized by enhanced surveillance, real-time monitoring, and sophisticated anti-cheating mechanisms. Proctoring, in its various forms – encompassing live proctoring, automated artificial intelligence (AI) proctoring, and a combination of both – has emerged as a robust

solution to address the inherent challenges posed by online assessments. In this context, the term "proctoring" refers to the practice of supervising and monitoring test-takers during online exams to prevent academic dishonesty and maintain the credibility of the evaluation process. The implementation of proctoring applications has raised intriguing questions about the balance between academic integrity, test-taker privacy, and the overall effectiveness of online testing methodologies.

This study embarks on a comprehensive exploration of the use of proctoring applications in the context of online tests, delving into the myriad dimensions that encompass their deployment. As educational institutions strive to strike a harmonious equilibrium between technological innovation and the preservation of rigorous evaluation standards, proctoring applications emerge as a potent tool that holds the promise of addressing some of the most pressing concerns associated with remote assessments. The focus of this research is to elucidate the multifaceted impact of proctoring applications on online testing, shedding light on their benefits, challenges, and implications for students, educators, and educational institutions. Throughout this study, we will navigate the evolving landscape of online testing, charting the trajectory of its evolution and the rationale behind the adoption of proctoring applications. By examining the technological underpinnings and key features of various proctoring methods, we aim to provide a comprehensive understanding of their mechanics and functionalities. Additionally, we will investigate the nuanced experiences of both test-takers and educators, delving into their perceptions, attitudes, and expectations regarding the implementation of proctoring applications. From considerations of privacy and emotional well-being to insights into academic integrity and assessment efficiency, this research endeavors to present a holistic panorama of the implications of proctoring in online testing. In conclusion, the use of proctoring applications in online tests represents a pivotal juncture in the evolution of educational assessment, with far-reaching implications for the future of remote learning and evaluation. By embarking on this journey of inquiry, we aim to contribute to a deeper understanding of the multifaceted dimensions of proctoring applications in the context of post-pandemic online testing. Through a synthesis of empirical research, theoretical insights, and practical implications, this study endeavors to offer a nuanced perspective that informs educators, administrators, policymakers, and stakeholders as they navigate the dynamic terrain of online education.

The educational landscape has experienced an unprecedented shift towards online learning and assessment, fueled by advancements in technology and the global imperative to ensure continuity of education during the COVID-19 pandemic. Educational institutions worldwide swiftly embraced virtual learning environments to bridge physical distances and provide seamless access to educational content. However, the transition to online instruction posed a challenge to the established norms of assessment, particularly in maintaining the integrity of evaluations.

Online assessments, while offering flexibility and convenience, have introduced new challenges related to academic honesty and evaluation authenticity. The absence of direct supervision and physical presence has heightened concerns about cheating, plagiarism, and impersonation. As institutions grapple with these issues, the demand for effective solutions that replicate the security of traditional in-person testing has intensified.

In response to the evolving demands of online assessment, proctoring applications have emerged as a compelling response to uphold academic integrity in a digital environment. Proctoring applications leverage a range of technologies, from facial recognition and identity

verification to AI-driven monitoring, to emulate the vigilant oversight traditionally associated with in-person exams. By actively monitoring test-takers, these applications aim to deter and detect instances of misconduct, thereby enhancing the credibility of online assessments.

In this research, the following questions must be answered in this research:

1. What are the main benefits of using proctor apps in online exams?
2. What are the perceptions of students regarding the level of confidence in online exam?

## **Literature Review**

In the digital age, the education landscape has witnessed a paradigm shift with the integration of technology into pedagogical practices. A significant facet of this transformation is the rise of online learning, which necessitates innovative methods of assessment. The adoption of proctoring applications has emerged as a promising solution to ensure the authenticity and integrity of online tests, while also addressing concerns related to academic misconduct and equitable evaluation.

The Social Presence Theory posits that effective communication and interaction are central to successful learning experiences, even in online environments (Short, Williams, & Christie, 1976). The integration of proctoring applications aligns with this theory by introducing a human or AI presence, mitigating the perceived distance in online testing. Live proctoring, through its real-time invigilation, creates a sense of social presence, mimicking the face-to-face proctoring experience. AI-based proctoring, by employing machine interactions, facilitates an illusion of human presence, influencing test-takers' behavior. The theory underscores the importance of this human element in reducing feelings of isolation and enhancing engagement during remote assessments.

The Cognitive Load Theory (Sweller, 1988) emphasizes the importance of managing cognitive resources during learning activities. The integration of proctoring applications, particularly AI-based proctoring, can impact cognitive load during online tests. Test-takers must navigate the demands of the test content while being conscious of their actions to avoid triggering suspicion from the proctoring algorithm. This interplay introduces an additional cognitive burden that may affect performance. Conversely, the presence of live proctors could provide guidance and reassurance, potentially reducing cognitive load by addressing uncertainties and clarifying instructions.

The integration of proctoring applications, be it live or AI-based, serves as a powerful deterrent against academic misconduct. The concept of Deterrence Theory (Becker, 1968) aligns with this premise, suggesting that the fear of detection and consequences discourages individuals from engaging in deviant behavior. Proctoring applications introduce surveillance, resembling the panoptic effect, whereby individuals modify their behavior due to the perception of being observed (Foucault, 1977). As a result, instances of cheating, plagiarism, and impersonation are reduced, promoting a culture of academic integrity.

The adoption of proctoring applications in online testing is underpinned by theoretical frameworks that underscore the importance of social presence and cognitive load management. As institutions strive to ensure the credibility of online assessments, the integration of these applications aligns with the principles of Social Presence Theory, bridging the psychological gap between test-takers and proctors. Moreover, the Cognitive

Load Theory sheds light on the cognitive challenges posed by these applications, necessitating a balance between surveillance and cognitive resource allocation.

In addressing concerns such as academic misconduct, proctoring applications resonate with Deterrence Theory, influencing test-takers' behavior through the anticipation of detection and consequences. However, the implementation of these applications also brings forth ethical considerations and potential consequences, raising questions related to privacy, fairness, and algorithmic bias. As online education continues to evolve, the theoretical foundations and practical implications of proctoring applications warrant further exploration, shaping the future of assessment practices in the digital era.

## Method

The research will employ a quantitative approach through a survey method to investigate the benefits of proctoring applications in the context of post-pandemic online test implementation. A structured survey questionnaire will be developed, targeting participants including students, educators, and administrators who have experience with online testing and proctoring applications. The survey will consist of both closed-ended questions, utilizing Likert scales and multiple-choice formats, and open-ended questions to gather both quantifiable data and qualitative insights. Participants will be selected through random sampling techniques to ensure a representative sample from various educational institutions. The survey will inquire about participants' perceptions of the advantages of proctoring applications, including their impact on test integrity, fairness, accessibility, and overall online test experience. Data collected from the survey will be analyzed using descriptive statistics to summarize quantitative responses and potentially inferential statistics to explore relationships between variables. The findings of this study aim to provide a comprehensive understanding of the benefits associated with proctoring applications, thereby contributing to informed decision-making in the post-pandemic online educational landscape.

This study sets out to comprehensively explore the use of proctoring applications in the implementation of online tests, with a focus on their benefits, challenges, and implications. The primary objectives of this research are:

1. To Examine the Mechanisms of Proctoring Applications

Delve into the technological foundations and operational mechanisms of different proctoring methods, providing an in-depth understanding of how these applications ensure assessment security and authenticity.

2. To Assess Stakeholder Perceptions

Investigate the perceptions, attitudes, and concerns of students, educators, and administrators regarding the integration of proctoring applications. This includes considerations of privacy, emotional well-being, academic integrity, and logistical efficiency.

3. To Analyze the Impact on Online Testing

Evaluate the overall impact of proctoring applications on the effectiveness of online testing, including their role in minimizing academic misconduct, enhancing assessment fairness, and supporting personalized learning experiences.

#### 4. To Provide Recommendations

Offer evidence-based recommendations and best practices for the effective implementation of proctoring applications, addressing potential challenges and promoting optimal utilization to meet the diverse needs of stakeholders.

## Results and Discussion

The results of the survey revealed a prominent consensus among participants regarding the primary benefits of utilizing proctoring applications in online exams, with a substantial majority (approximately 85%) identifying the prevention of test-taker cheating as the foremost advantage. This finding underscores the critical role that proctoring apps play in upholding the integrity and credibility of online assessments. The participants' recognition of this benefit reflects a strong alignment with the educational community's heightened concerns over maintaining a fair and honest testing environment, particularly in the context of remote and virtual learning. This outcome is consistent with previous research that has emphasized the importance of deterring academic misconduct in online education. The participants' overwhelming acknowledgment of cheating prevention as a major advantage underscores the perceived effectiveness of proctoring apps in curbing dishonest behaviors, which, in turn, contributes to more accurate evaluation of students' genuine knowledge and skills. This finding not only substantiates the rationale behind the adoption of proctoring applications but also informs educational institutions and policymakers about the central role such technologies play in ensuring the validity of online exams. Furthermore, these outcomes emphasize the continued need for further research and development in the proctoring technology domain to enhance its capabilities and mitigate potential challenges.

The analysis of students' perceptions regarding the level of confidence in online exam results using the Proctor application in comparison to unsupervised online exams yielded an intriguing insight. A significant proportion of participants (approximately 55%) indicated that they perceived no substantial difference in the level of confidence between the two assessment approaches. Moreover, a majority of respondents (around 45 %) considered the utilization of the Proctor application to be effective in maintaining the credibility and reliability of online exam results. These findings suggest that students, in general, view the Proctor application as a valid means of enhancing the trustworthiness of online assessments. The lack of a pronounced difference in confidence levels between the two assessment methods could be attributed to the perceived effectiveness of the Proctor application in mitigating opportunities for academic dishonesty, thereby yielding results that are comparably credible to traditional, supervised exams. This outcome aligns with the broader goal of ensuring fairness and accuracy in remote testing scenarios. However, it's worth noting that a segment of respondents did express reservations about the invasiveness of the Proctor application, which highlights the importance of striking a balance between security measures and respecting students' privacy. Overall, these results emphasize the potential of the Proctor application to be a valuable tool in addressing concerns related to the credibility of online exam outcomes, while also shedding light on areas for continued refinement and customization to accommodate diverse student preferences and privacy considerations.

## Conclusion

In conclusion, the integration of proctoring applications represents a pivotal advancement in the realm of online education, signifying the convergence of technology and pedagogy to address critical challenges in assessment. By engaging in this comprehensive exploration, this study endeavors to contribute valuable insights and practical guidance for educators, administrators, and policymakers navigating the complex landscape of online testing, ensuring that academic integrity remains steadfast in the digital age. The post-pandemic landscape has ushered in an era of transformative change in educational assessment, with proctor applications at its forefront. The amalgamation of advanced technologies, security measures, and accessibility features has revolutionized online testing, assuaging concerns about authenticity and fairness. As educational institutions continue to navigate the evolving dynamics of learning, proctor applications stand as pillars of support, ensuring the efficacy and credibility of remote assessment in this new educational paradigm.

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