GOV·UK   Menu   🔍

Home ⌐ Education, training and skills ⌐ School curriculum ⌐ Exam regulation and administration
⌐ On-screen assessment: the evidence base for Ofqual's consultation

ofqual

Research and analysis

On-screen assessment: the evidence base for Ofqual's consultation

Published 11 December 2025

Contents

Summary

This short report summarises 4 research studies published alongside Ofqual's consultation on regulating on-screen assessment in GCSEs, AS and A levels. Together, these studies explore the opportunities, benefits, risks, and challenges of on-screen assessment. The findings provide a comprehensive evidence base and have directly informed Ofqual's proposed regulatory approach.

On-screen assessment research study

Opportunities, benefits, risks and challenges of on-screen assessments in England

[This report summarises research](#) externally commissioned by Ofqual and the Department for Education (DfE) and carried out between September 2023 and April 2024, which examined the implications of widescale national adoption of on-screen assessment for high-stakes qualifications in England. The study included 4 work strands: international comparisons; impacts on schools, colleges, and awarding organisations; student impacts; and risks and mitigations. Across these areas, the research identified potential benefits such as improved accessibility, particularly for students with special educational needs and disabilities (SEND), greater operational efficiency, and alignment with a digital society.

However, significant challenges were identified including unequal access to digital technology, inconsistent IT infrastructure, technical risks, and concerns about fairness, standards and delivery. While some on-screen assessment could be delivered within existing resources, widescale implementation would require considerable planning, gradual implementation, ongoing engagement, and, in many cases, additional investment to ensure fairness and secure delivery.

On-screen assessment in sessional high-stakes qualifications in England

Opportunities and risks in the eyes of students and parents

[This report summarises findings](#) from a February 2023 survey of 516 students (aged 15 to 18, preparing for GCSEs and A levels) and 500 parents, designed to understand perceptions of on-screen assessment and concerns about its potential widescale deployment in high-stakes qualifications in England.

Students were generally positive about digital technology and confident using devices. However, not all students had exclusive access to computers at home or school, and the amount of time spent using digital devices for learning varied considerably. Most students and parents expected some exams would move on screen in the next decade, but their support was cautious. While potential benefits were recognised, concerns persisted around technical failures, fairness (especially regarding device quality and access), and assessment security. There was a strong preference for a mixed-mode approach, with some exams on paper and others on screen, and a belief that not all subjects were equally suited to on-screen assessment. Ensuring suitable infrastructure, equal provision of technology, and opportunities for familiarisation were identified as key to building confidence if on-screen assessment were to be adopted more widely.

On-screen assessment and mode effects

A review of the effects of on-screen assessment on levels of engagement, cognitive demands and performance

[This review synthesises international and academic evidence on mode effects](#), the differences in student performance and experience between paper-based and on-screen assessment. It explores how mode effects vary by subject, task type, and student characteristics, and considers the relevance of these findings for high stakes exams in England for students typically aged between 16 and 18.

Key findings indicate that while students are often positive about on-screen

assessment, working on screen is often associated with greater cognitive demands, particularly when it comes to reading. Whether either of these factors affects performance in assessment is unclear, as there is not strong evidence of a clear and consistent pattern of mode effects in the literature. Moreover, some of the existing research may not be directly applicable to an English assessment context. The report concludes that although on-screen assessment offers certain advantages, inherent differences between on-screen and pen-and-paper formats are likely to produce some mode effects. Therefore, successful implementation requires ongoing evaluation, thoughtful design, and a commitment to maintaining standards.

Making sense of mode effects

A framework for anticipating performance differences in equivalent paper-based and digital test items

[This paper presents a framework](#) designed to help practitioners — such as test developers — anticipate whether specific test questions or their features are likely to produce mode effects, and to support researchers in designing targeted studies to investigate these phenomena. Drawing on a comprehensive review of the literature, the report identifies 4 stages in the question-answering process where mode effects may occur: information presentation, thinking required, response mechanism, and appraisal strategy.

Key insights include evidence that students often comprehend information more effectively on paper than on screen, particularly for longer, expository texts and under time pressure. Numerical tasks involving multi-step calculations and annotation of diagrams are typically easier on paper, where unrestricted physical access to the question supports strategies that minimise cognitive load. Performance in extended writing is influenced by a range of factors, including test takers' handwriting and typing proficiency. The ease of revising responses on screen affords strategies unavailable in paper-based tests, including trial-and-error strategies in some mathematics tasks, and greater flexibility in extended writing. Importantly, the framework emphasises that many mode effects may be intrinsic to the medium, rather than simply a matter of familiarity.

While our assessment-focused studies do not evaluate the cognitive benefits of handwriting for student learning, wider educational research suggests handwriting can support encoding and memory; any implications for high-stakes assessment require further study.

The evidence from these studies has shaped Ofqual's proposed approach to regulating on-screen assessment. Across all projects, gaps in the evidence base were identified, and Ofqual is committed to further research to ensure our regulatory approach is well-informed. We also encourage others across the sector to contribute to building the evidence base, so that future developments in

on-screen assessment are informed by high-quality research.

- [Read the full research reports](#)
- [Respond to Ofqual's consultation](#) on regulating on-screen assessment in GCSEs, AS and A levels (closes on Thursday 5 March 2026)

↑ Back to top

Help us improve GOV.UK

To help us improve GOV.UK, we'd like to know more about your visit today. [Please fill in this survey (opens in a new tab)](#).

Services and information

[Benefits](#)

[Births, death, marriages and care](#)

[Business and self-employed](#)

[Childcare and parenting](#)

[Citizenship and living in the UK](#)

[Crime, justice and the law](#)

[Disabled people](#)

[Driving and transport](#)

[Education and learning](#)

[Employing people](#)

[Environment and countryside](#)

Government activity

[Departments](#)

[News](#)

[Guidance and regulation](#)

[Research and statistics](#)

[Policy papers and consultations](#)

[Transparency](#)

[How government works](#)

[Get involved](#)

Housing and local services

Money and tax

Passports, travel and living abroad

Visas and immigration

Working, jobs and pensions