



EnglishScore

EnglishScore

Security Overview

April 2023

Executive summary

Individuals and organisations around the world rely on EnglishScore to provide accurate and trusted assessments of English language proficiency across the A2 to C1 levels of the Common European Framework of Reference (CEFR).

EnglishScore supports the integrity and reliability of its results by providing multiple layers of security throughout every stage of the assessment and certification process. Each layer is designed to reduce cheating and theft of test material without compromising accessibility, efficiency and individual rights to privacy.¹

EnglishScore's security measures are aimed at safeguarding four critical areas:

- **test item security:** ensuring the security of the test development process and the integrity of the content (*guarding against test theft*)
- **exam security:** ensuring a fair testing experience by enforcing test rules (*guarding against breach of test rules*)
- **certificate security:** ensuring that every EnglishScore certificate can be relied upon as an authentic measure of test taker proficiency (*guarding against faked certificates*)
- **information security:** following best industry practices to protect individual user data and secure our systems (*guarding against cyberattacks and exploits*).

EnglishScore's multilayered approach to security creates safeguards against any single point of failure. Security practices are furthermore regularly reviewed and updated at every stage of test development and administration.²

¹ EnglishScore is fully compliant with European Union General Data Protection Regulations (GDPR) as incorporated into UK Law with the Data Protection Act (2018).

² Following the advice and guidelines of the International Test Commission (2014).

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Introduction

EnglishScore provides a suite of English language proficiency assessments administered via a mobile application, including Core Skills (Grammar and Vocabulary, Reading, and Listening), Speaking, and Writing.

Test results are provided based on the Common European Framework of Reference (CEFR A2–C1) together with a numerical EnglishScore (0–599), which helps learners to understand their attainment within a CEFR band.

The test is designed for learners 16 years of age and older, and results are typically used in employment contexts. The test and its results are free of charge, with the test-taker offered the opportunity to certify results for a cost (approximately US\$20).

EnglishScore can be used on both iOS and Android mobile devices. More than 6 million users have downloaded the EnglishScore app, and more than 4 million tests have been successfully completed to date.

I.

Test item security

I. Test item security

Utmost care and attention is paid to the creation and maintenance of the EnglishScore assessment to ensure that assessment content cannot be anticipated, studied or obtained prior to a test-taker sitting the exam.

A large rotating item bank means that fresh content is always delivered to test-takers, even after repeated sittings, while our secure development processes and controlled publication and distribution ensure the item bank remains protected from theft, attack or exploit.

1. Large, rotating item bank

EnglishScore was designed from the outset to securely assess a high volume of test-takers, many of whom may be simultaneously sitting the exam. Early choices in test design ensure ease of use (multiple choice selection) (see Figure 1) while reducing the possibility of content memorisation or cheating by comparing simultaneous assessments.

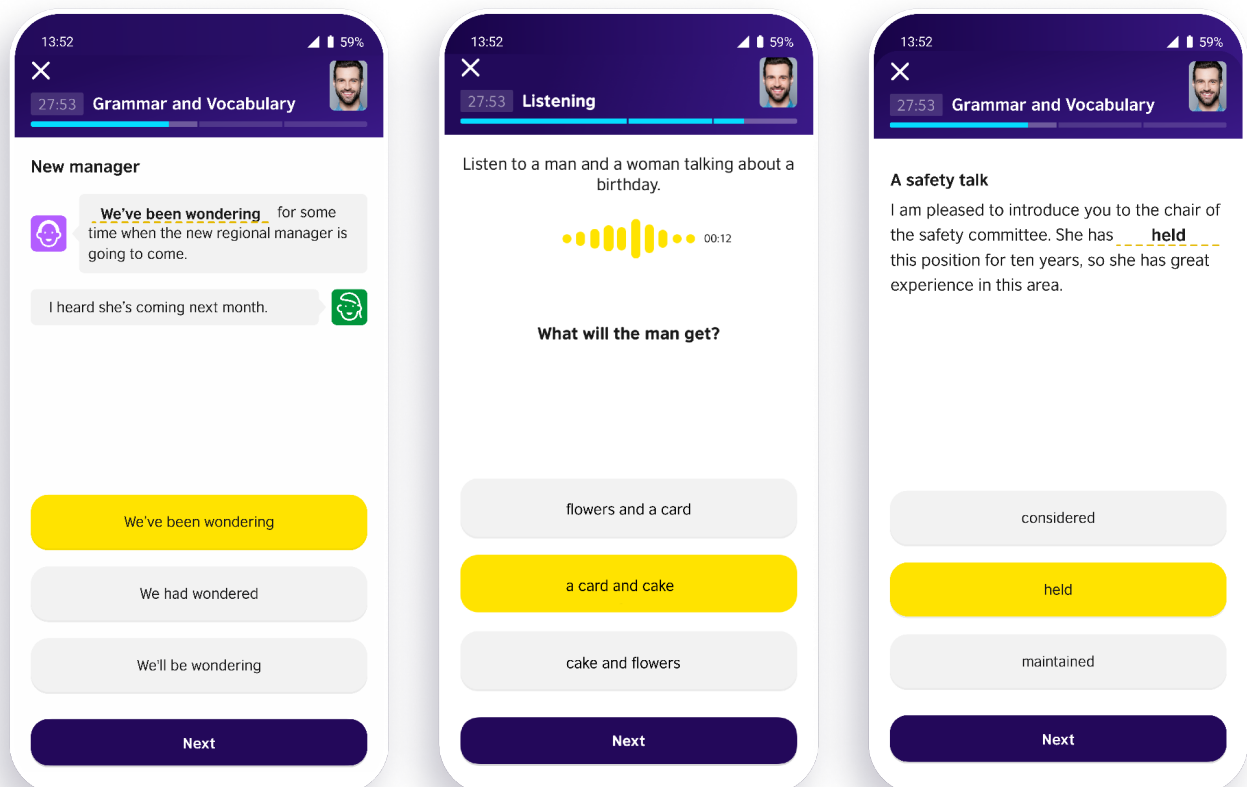


Figure 1. Example question formats from the EnglishScore Core Skills Test.

a. Item bank

Each EnglishScore assessment is composed of a select number of items drawn from a large and ever-evolving pool of items (the EnglishScore ‘item bank’).

In the Core Skills test, items are presented in randomised order. Each item has three possible answer choices, with the position of the correct choice randomised on screen.

In the Speaking and Writing assessments, items at the appropriate difficulty for the level are drawn at random from the item bank, with checks in place to ensure the test-taker has not previously seen the item.

b. Assessment branching

Items are served dynamically to EnglishScore test-takers based on their performance on prior items. This further reduces the likelihood of two test-takers experiencing the same assessment.

c. Assessment instances

New assessment instances are generated weekly using new content from the item bank, further ensuring regular changes to the EnglishScore assessment that cannot be anticipated.

2. Secure test development

The end-to-end process of test development is secured against unauthorised leaks and protected against theft, tampering or exposure.

a. Original content

All item writers are expected to produce original content for EnglishScore, ensuring that test-takers are always presented with unique, never-before-seen questions.

b. Continuous development

The EnglishScore item bank is continuously refreshed and improved based on data from monitoring. The item bank is updated in the following ways:

- *new items*: content is written following a rigorous acceptance process adhering to test specifications designed by experts
- *revising items*: existing items are reviewed and amended regularly
- *retiring items*: selected items are flagged for review and discussion and may be permanently retired from the item bank.

c. Continuous monitoring

The EnglishScore item bank is continuously monitored for performance at many levels, including:

- *item health*: ensuring that test items are performing as expected (for example, that C1 items are not being answered correctly by A2 level test-takers)
- *assessment health*: ensuring that each unique assessment is performing as expected relative to others (for example, that deviations in performance fall within accepted levels)
- *item exposure*: tracking the number of times an item has been viewed by real test-takers.

d. Standard security protocols

All content writers, database administrators and test developers have signed non-disclosure agreements and follow our security protocols (see 'Information security' section) to ensure that the EnglishScore item bank remains confidential and secure.

3. Controlled publication, distribution, scoring

a. Publication

Each EnglishScore assessment is delivered securely to the app from our database and server infrastructure (as opposed to being bundled with the application). This means that test-takers, or malicious actors, never have direct access to the items.

b. Distribution

The EnglishScore assessment is accessible only through EnglishScore mobile and web applications. The assessment is available only after the test-taker has registered and agreed to our terms of service.

c. Scoring (server-side marking)

Full answer keys are not shared with test-takers, nor are they stored within the EnglishScore app. All test-taker responses are sent securely back to our server for marking. It is not possible for test-takers to spoof or generate false results. This is independently corroborated as part of EnglishScore's annual system security testing (covered in greater detail under 'Information Security').

II.

Exam security

II. Exam security

During each EnglishScore exam sitting on a mobile device, specific conditions are enforced to discourage cheating and to promote trust and reliability. This includes requiring test-takers to log in and agree to exam conditions, including photo capture throughout the sitting. A number of behaviours are also prohibited during the assessment to further protect exam integrity.

1. Secure login

All users are required to provide an email address upon signing up to the service. On Android devices, EnglishScore also accepts authentication via an existing Google or Facebook account.

2. Exam conditions

Before starting the test, users are informed of the test expectations and conditions:

- the test may not be paused
- the test-taker must be alone in a well-lit place
- the camera must be enabled.

An EnglishScore assessment cannot begin until the test-taker has agreed to these conditions.

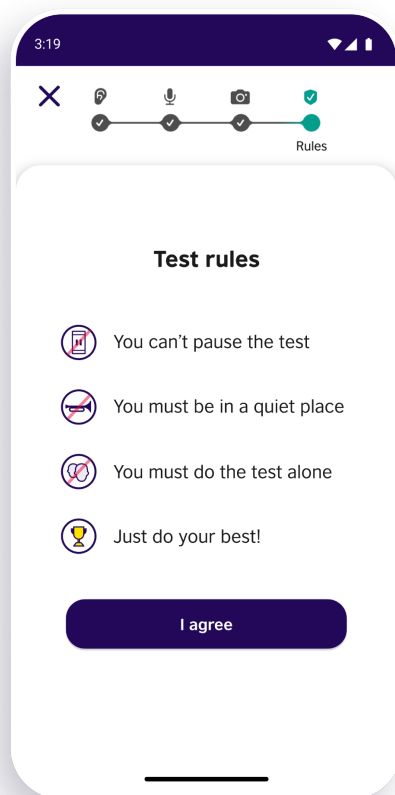


Figure 2. Test-taker agreements.

3. Secured sittings

EnglishScore is the world's only mobile-proctored English language assessment. Before beginning an EnglishScore test, test-takers explicitly opt in to exam security, which utilises the on-device camera throughout the test sitting.

Only test sittings with security enabled may be certified or shared with an organisation. Test sittings taken without security are used for practice or preparation purposes and cannot be used as evidence of test-taker proficiency.

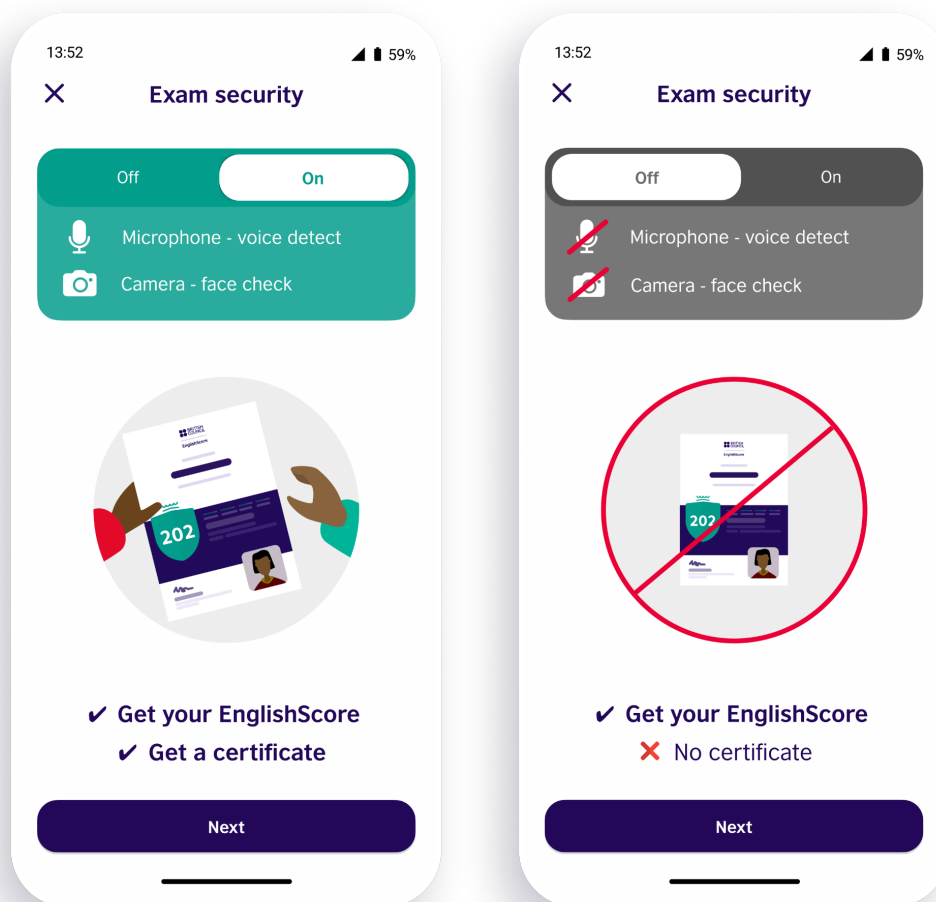


Figure 3. Exam mode options.

4. Proctoring (real-time)

EnglishScore is the world's only mobile-proctored English language assessment. On each secured exam sitting, face detection technology monitors the camera to encourage test-takers to keep their faces clearly visible at all times.

The technology detects five types of behaviours in real time:

- face not visible
- face partially visible
- face looking away
- more than one face detected
- face too small

When a violation is detected, the test is paused and a photograph is taken. These violation images are captured, stored, and viewable by:

- A human proctoring team at EnglishScore as part of the EnglishScore certification process;
- Dashboard administrators when the test-taker has consented to share their test information with an institution.

Unused photographs are permanently deleted after one year or upon user request.

5. Proctoring (photo capture)

In addition to technology monitoring for possible violations, standard proctoring is conducted on all secured sittings by capturing photographs at random intervals throughout each test sitting (figure 4). The presence of an enabled camera throughout the assessment deters fraud and cheating.



Figure 4. Proctoring photos captured during a sitting of the EnglishScore test.

The resulting photographs are stored securely in compliance with GDPR regulations and are viewed only if the test-taker chooses to purchase a certificate or chooses to share their score with an organisation.

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- A human proctoring team at EnglishScore as part of the EnglishScore certification process;
- Dashboard administrators when the test-taker has consented to share their test information with an institution.

Unused photographs are permanently deleted after one year or upon user request.

6. Prohibited behaviours

a. Retake limits

Test-takers may begin an EnglishScore Core Skills assessment two times in a 24-hour period. There is an additional restriction of 10 times in 28 days.

The Speaking and Writing Tests can only be started once in a 24-hour period and 4 times in 28 days.

b. Screen share and screen capture

The use of screen sharing or screen capture is prohibited on all devices. This prevents unauthorised reproduction or storage of exam content.

c. Exit penalties

If a test-taker exits the test for 15 seconds or longer, the question they were answering is automatically skipped, possibly affecting their final score. The test-taker is served a new question upon returning to the assessment.

If a test-taker exits the test for 120 seconds or more, the test is automatically cancelled and they are prompted to start again.

7. Dashboard controls

EnglishScore university and corporate partners have access to additional information and controls via the secure EnglishScore Dashboard.

a. Potential violations

Violation images captured during a test-taker's exam sitting are provided and flagged in the EnglishScore dashboard for further human review. (See Figure 5.)

Dashboard administrators may filter for problematic sittings and inspect the photographs in greater detail before making a final judgement on the assessment.

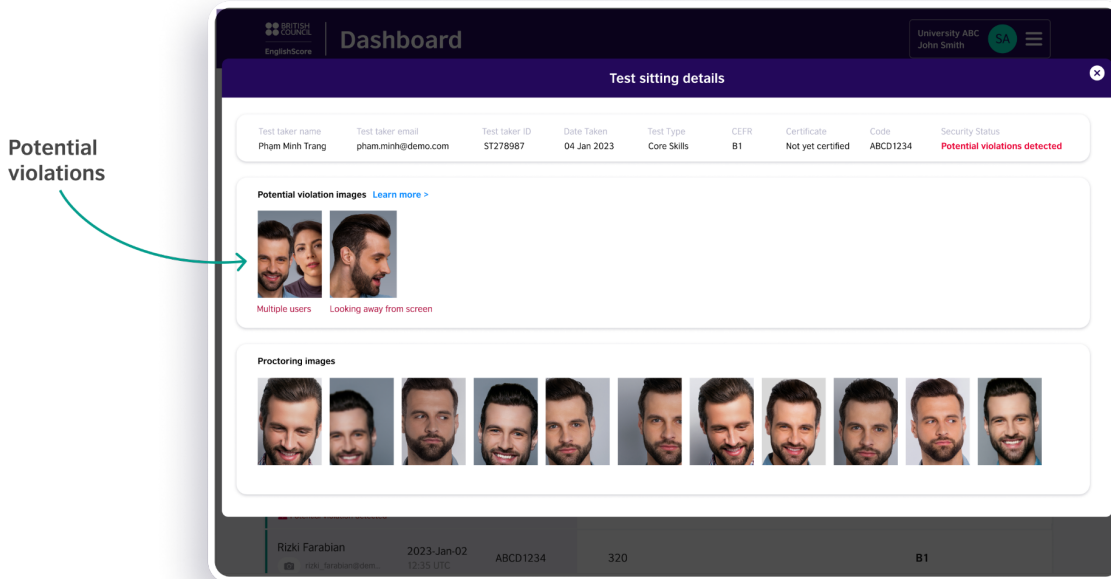


Figure 5. EnglishScore Dashboard showing test sittings with potential violations

b. Controlled certification

EnglishScore university and corporate partners may decide which sittings may be certified. This applies an additional layer of security on existing EnglishScore practices.

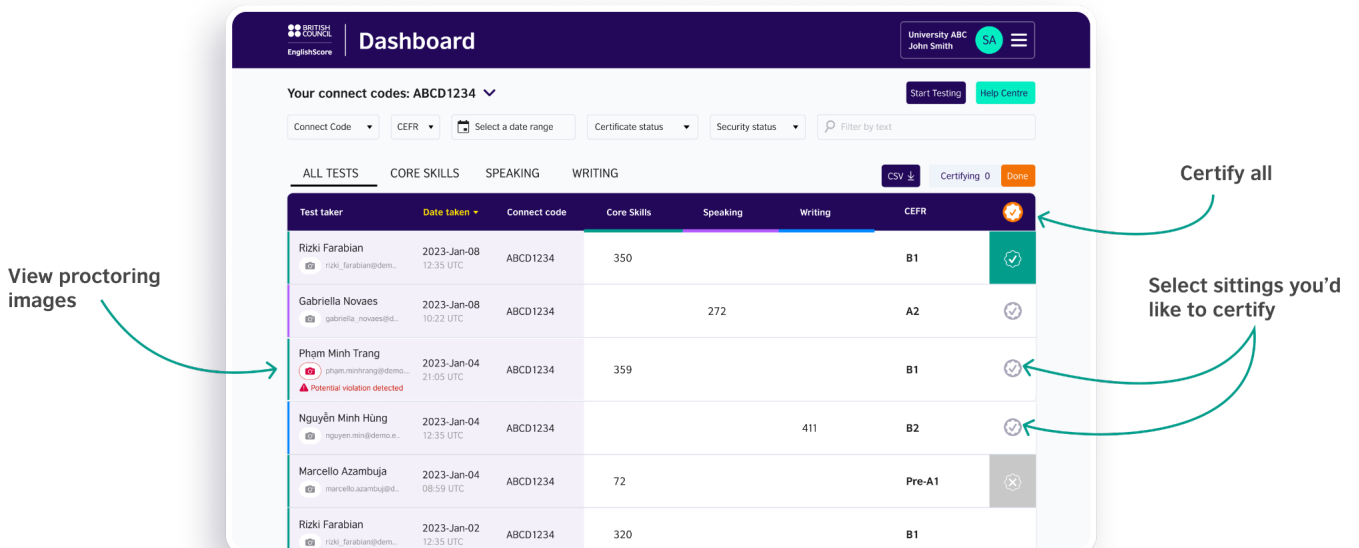


Figure 6. EnglishScore Dashboard showing certification features

All sittings sent for certification still undergo the EnglishScore proctoring process. (See next section.)

III.

Certificate security

III. Certificate security

After an EnglishScore assessment is completed, the test-taker is invited to purchase a certificate that provides secure verification of their results (Figure 7). If they choose to purchase a certificate, they are prompted to take a photograph using their device camera. In order to ensure the photograph is recent, photo uploads are not accepted.

Test-takers may also be invited to complete certification by their university, employer, or other institution.

Once issued, certificates are used as proof of English language ability. The certificates are shared widely across social media, as part of job applications, for scholarship applications, on CVs and other professional contexts.

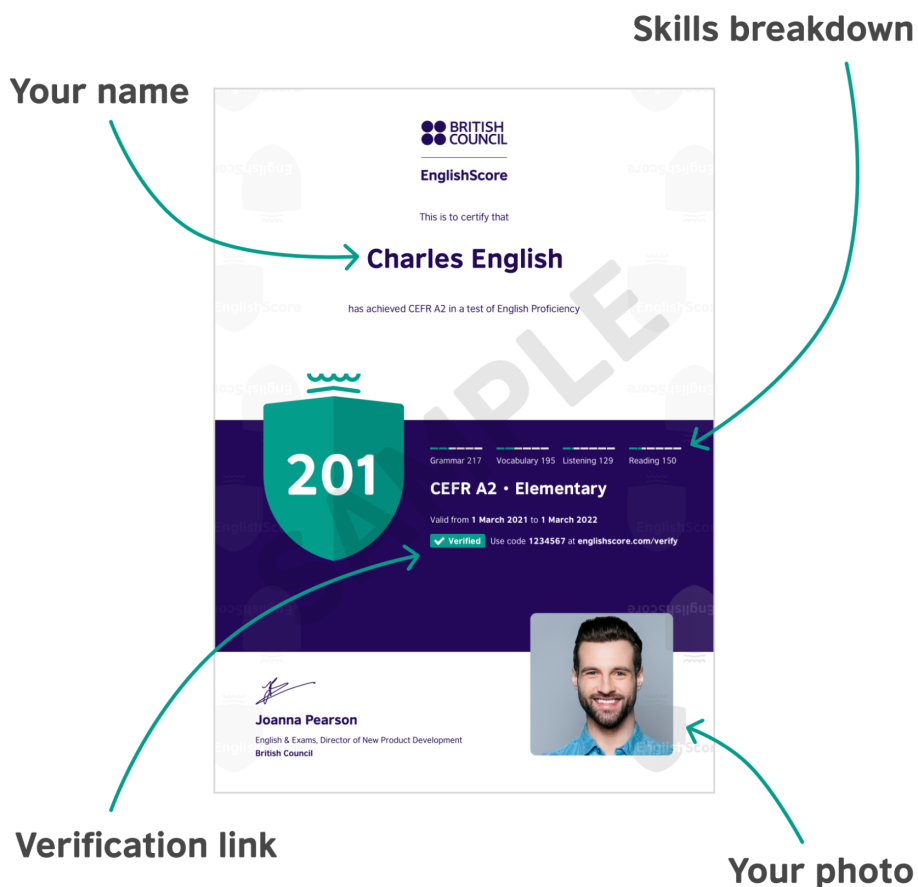


Figure 7. Sample certificate, highlighting the key points and security features.

Each certificate is provided in digital PDF format, and test-takers also have the option of ordering a physical print.

1. Proctoring (human review)

Every certificate issued by EnglishScore undergoes human review within one business day.

The photographs on each valid EnglishScore Certificate are expected to meet the following standards:

- the test-taker is clearly visible throughout the test
- the test-taker is the same person throughout the test
- no second person is visible with the test-taker
- the certificate photo is the same person as the test-taker
- the certificate photo is a clear image of the test-taker's face

Photographs are reviewed through a secure and bespoke content management system (see Figure 8).

The figure displays two examples of the proctoring management system interface. The top example shows a 'Pass' status with a 'Great' reason. The bottom example shows a 'Fail' status with the reason 'Invalidate - Not alone'.

Example 1 (Pass):

- Status: Unreviewed, **Pass**, Fail, Flag for follow-up
- Reason: **Great**, Acceptable
- Notes: Add notes here [Save]
- Photographs: 8 individual portraits of the test-taker.

Example 2 (Fail):

- Status: Unreviewed, Pass, **Fail**, Flag for follow-up
- Reason: Invalidate - Not visible, Invalidate - Sitting issue, **Invalidate - Not alone**, Regen - Main photo issue, Regen - Photos don't match
- Notes: Add notes here [Save]
- Photographs: 4 photos showing the test-taker and another person.

Figure 8. Two example sittings as viewed in the secure EnglishScore proctoring management system.

Using the secure EnglishScore proctoring system, human reviewers determine if a sitting has passed, requires further review (escalation), or if the sitting fails the EnglishScore standards.

Figure 8 shows one acceptable example ('Great'). The user's face is clearly shown throughout the test sitting, and all photos match. Also shown is an unacceptable example ('Fail') where the user is not at all visible. We cannot verify that the front photo matches the sitting photos.

If a certificate does not meet standards, EnglishScore will:

- require the user to regenerate their certificate if there is an issue with the front photo, or
- invalidate the sitting and request the user to retake the test at no additional charge.

2. Watermarking and password protection

Each certificate is watermarked and password-protected to prevent tampering, misuse or alteration. Watermarks are overlaid on key areas such as the identity photograph and proctoring data. Certificate PDFs are password-encrypted to prevent editing. Lastly, original certificates may always be independently verified (see 'Independent, secure verification' below).

3. Independent, secure verification

Each Professional Certificate has a unique ID. This ID can be used for secure and independent verification of the certificate at <http://englishscore.com/verify>. If a valid certificate ID is entered, the certificate PDF is loaded directly from EnglishScore servers and presented for review.

This can then be matched to the test-taker and/or the original certificate presented. (For example, if someone uses a real certificate ID and alters the other information, this service enables the verifier to check for any mismatches.)

IV.

Information security

IV. Information security

EnglishScore is committed to keeping user and assessment data safe and secure by using industry-wide best practices in compliance with the European Union General Data Protection Regulations (GDPR).

EnglishScore utilises a wide range of technical and organisational methods to meet its security commitments, including annual independent reviews, regular staff training and industry standard security practices.

1. GDPR

EnglishScore guards user data and privacy in compliance with the European Union General Data Protection Regulations (GDPR). EnglishScore collects and stores user data based on three main lawful bases:

- consent
- performing a contract
- legitimate interests.

EnglishScore relies on a number of technical and organisational policies and methods to keep user data secure, most of which are detailed in subsequent sections.

The complete text of the EnglishScore Privacy Policy is available [here](#).

2. Technical protection

EnglishScore's software development follows industry best practices. The following is a non-exhaustive list of the types of activities, practices and principles that are used to guide our implementation and minimise risk.

- All communication is over Transport Layer Security (TLS) protected connections.
- Our application programming interface (API) infrastructure is the source of truth for all user interactions and assessments and uses JSON web token (JWT)/Bearer authentication (RFC6750).
- Credentials are granted on a least-privileged basis, are periodically rotated and are stored outside code.

- All access to production data is carefully controlled and limited. Data masking is used by default, ensuring that personally identifiable information is only available when absolutely necessary.
- Staff systems use, where possible, single sign-on and are protected by two-factor authentication.
- Software dependencies are regularly monitored, and updates applied rapidly as and when security weaknesses are identified.
- Encrypted backups of important data are captured daily and stored on independent infrastructure to guard against total failure of our primary hosting provider.

We remain vigilant for new security threats and monitor major reported breaches and vulnerabilities to understand their potential impact on our operations. Our Security Incident Response Team is kept on 24/7 standby and meets periodically to assess our practices and procedures.

3. Annual penetration testing

EnglishScore's technical protections are put to the test annually by an independent security advisory group that conducts penetration testing to the [NCSC's CHECK standard](#). The testing reviews key components of the EnglishScore mobile and web applications as well as server infrastructure and identifies areas of risk or vulnerability. The resulting recommendations are queued for implementation based on the level of risk that the identified gaps represent.

4. Information management and security practices

All staff undergo training in standard information management and security practices. This includes but is not limited to:

- password strength and use of multifactor authentication
- how to access sensitive information appropriately.

5. Standard terms of use

The EnglishScore [Terms of Use](#) are available online and accessible from EnglishScore applications (Figure 7).

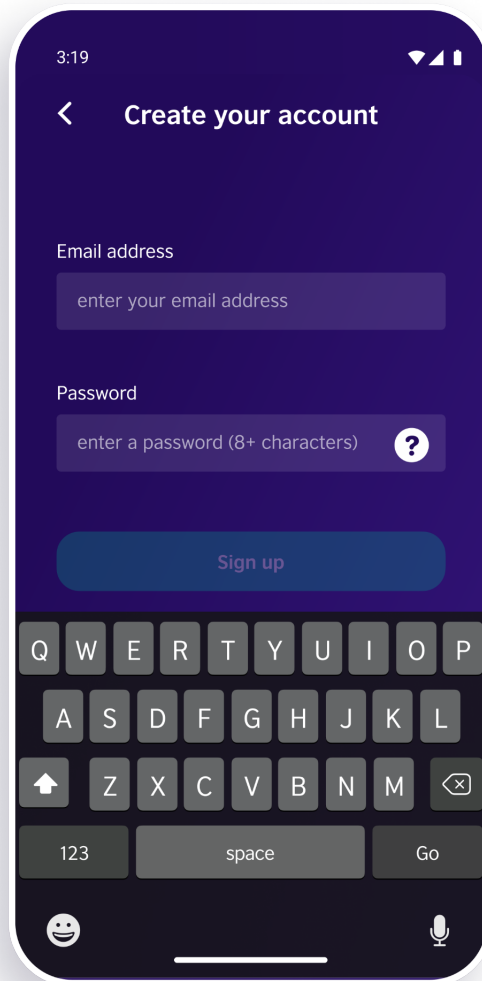


Figure 9. 'Create account' screen from the EnglishScore app.

When registering for the service, users are given the opportunity to review both the privacy policy and terms of use ('our rules') and are required to agree to them. All key terms have been written at a B2 level English to ensure understanding.

The EnglishScore terms of use explicitly prohibit cheating, content replication, fraud and other activities.

V.

In case of breach

V. In case of breach

1. Detection

EnglishScore utilises a number of methods for detecting improper or illegal use of the service. This includes:

- monitoring for unique EnglishScore assessment content available publicly or on non-EnglishScore platforms
- tracking and identifying unusual individual test-taker behaviour, e.g. high-frequency correct answers outside the bounds of baseline behaviour
- a [bug bounty program](#) that encourages responsible reporting of bugs and security vulnerabilities
- a [tip line](#) for users to report or flag suspected security breaches.

2. Response

When improper or illegal use of the EnglishScore service is detected, the response is calibrated to the severity of the breach.

For example, if a test-taker's sitting photos do not adhere to standards (as detailed in the 'Certificate security' section), the sitting may be invalidated and the test-taker contacted to resit the assessment. In cases where the sitting passes scrutiny, the test-taker is invited to redo their certificate (i.e. retake their certificate photo).

In more severe cases – for example, a violation of our terms of use or deliberate attempts to copy or record the EnglishScore assessment – a user may be permanently banned from the service.

Contact Information

About the British Council

The British Council builds connections, understanding and trust between people in the UK and other countries through arts and culture, education and the English language.

We work in two ways – directly with individuals to transform their lives, and with governments and partners to make a bigger difference for the longer term, creating benefit for millions of people all over the world.

We help young people to gain the skills, confidence and connections they are looking for to realise their potential and to participate in strong and inclusive communities. We support them to learn English, to get a high-quality education and to gain internationally recognised qualifications. Our work in arts and culture stimulates creative expression and exchange and nurtures creative enterprise.

We connect the best of the UK with the world and the best of the world with the UK. These connections lead to an understanding of each other's strengths and of the challenges and values that we share. This builds trust between people in the UK and other nations which endures even when official relations may be strained.

We work on the ground in more than 100 countries. In 2019–20, we connected with 80 million people directly and with 791 million overall, including online and through our broadcasts and publications.

Contact EnglishScore

For questions about the test, including content development, test scoring, security or certification, please contact:

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