



Authentication

How can teachers be sure that the work carried out by learners outside of the classroom is the work of the learner?

Online teaching has presented many challenges. Some are more basic than that relating to assessment such as, how to make contact with learners and how to get work back from learners. However, many schools have successfully engaged with their online learners. Teaching and learning are taking place. An important aspect of teaching is assessment - making judgements about whether learning is occurring. For that to happen, the teacher needs to receive information from the learner. That happens in many ways including simple, spontaneous “thumbs up” 👍 responses in chat lines to assignments submitted through plagiarism detection software.

This information sheet outlines what we have gleaned about how to authenticate the information we are getting back from learners.

- Key stage 4 and post-16 considerations
- General advice across all phases
- Links to associated resources
- Keeping Watch
- Lessons from Higher Education
- Closing thoughts

Authentication is relevant at all ages but critical when qualifications and awards are involved. We will not repeat the description of the information coming from the Awarding Organisations (AO). It is important for our key stages 4 and post-16 colleagues to seek the specific advice and requirements set by their AO. Below are links to relevant sources of information.

In the current (February 2021) situation we are being asked to declare grades for each GCSE and GCE candidate with the option for all parents to challenge the grade. It gives us more confidence to assert the validity of those grades if we have demonstrable authentication strategies in place.

For learners working through key stage 1 to key stage 3, the assessments are not mandated by external organisations but they still might have significance for the learners, parents, teacher and the school. Authentication is still important. We need to know that the judgements we are making are based on the actual work of the learners and aware of the amount of assistance they have received in producing the work.

Key stage 4 and post-16 considerations

The Joint Council for Qualifications (JCQ) is a membership organisation comprising the eight largest providers of qualifications in the UK. JCQ provides a single voice for its members on issues of examination administration and, when appropriate, qualification and wider education policy. They offer some guidance to teachers relating to non-examined coursework here and here.

There are a number of informal principles guiding the provisions during the time of the pandemic. The same arrangements should apply to all qualifications. For qualifications: remote systems need to be replicated in the face-to-face. Remote assessment should be by exception rather than the norm. We all must understand that the specification subject content has not changed but conditions might be modified in the light of instructions from Ofqual. Any changes will be specified by your AO.

Our learners must be partners in the authentication process.

They must understand that to present material that is not their own will be considered an act of malpractice. That includes:

- copying directly from the internet, books or other sources without proper acknowledgement
- copying directly from another learner or creating work with another learner
- using the ideas of another person
- allowing others to modify their work
- sharing work to elicit feedback
- using artefacts created by another learner
- using artefacts taken from the internet.

Also, we must remind learners that they must not make available their work to others through any medium including social media.

- They must be made aware of the JCQ document *Information for candidates – Social Media –*
- The learners should be practised in copying, using and acknowledging other people's work by using correct citation and referencing.
- The learner is required to sign a declaration that the work submitted for assessment is their own.

The following bullet points are drawn from Ofqual, JCQ and AO documents

- If some work is done unsupervised, then the Centre must be confident that the learners' work is theirs.
- Centres should be clear to the learners that any copying, without acknowledgement, is deception.
- Assessment must be undertaken under conditions that allow the Centre to authenticate the work.
- The Centre must record and report to the AO details of any additional assistance given to individuals or the class as a whole.
- The Centre must retain the learners' work and made available on request until the results window has closed..
- Colleagues are advised to consult the relevant Awarding Organisation for precise instructions.

General advice across all phases

The major tension in this area is between gaining rich data on which to make an assessment judgement and the immediacy of receiving the information from the learner. The longer it takes between setting an assessment task and receiving the learner's response, the more potential for the response to be impacted upon by others, or for the learner to submit a response that is not theirs.

The generic considerations when receiving a response from learners include:

- Does it match the learner's usual performance?
- Is it within the learner's general performance?
- In the style similar to the learner's usual style?
- Is the submission within the expected time scale?

The cautions and considerations include:

We would want work to be better than usual to evidence progress.

A different topic might reflect a specific talent/aptitude of the learner and so be above the general performance of the learner.

Style can improve. Also, other factors might have had an influence on the style of the work.

Response should be quick for synchronous activity but proportionately longer for more sustained work.

The richest learning activities are often those that are sustained, take place over a period of time, without direct and continuous supervision. The only evidence is the submitted work - the electronic file. Most file editors give access to the properties or information about the file which might include the author, created date, modified date, etc. This can support the authenticity or suggest that there is some doubt.

There are a number of techniques that can be used in online lessons with the aim to maximise the authenticity of the submitted work or to reduce the possibility of unauthentic work being submitted. The important assurance that it is the identified learner at the other side of the computer through learners using only school assigned username and accounts and learners using self-assigned and secret passwords.

The teacher "seeing" the learner - video on.

The teacher "hearing" the learner - audio on.

The timeliness of response to requests such as asking for: "hands up", send an emoji 👍, add a comment to the chat line or a shared document or a voice response.

Uploading a screenshot/screen photo/scanned image of contemporaneous work.

Useful resources are those that enable the whole class to simultaneously contribute to a single screen including: Padlet, presentation software,

Photographs and scanned images of paper-based and artefact-based work - check the timestamp of the file.

Declarations of authorship - asking the learner to confirm that it is their work and not that of others (preceded by lessons on citation and referencing).

Links to associated resources

AQA authentication and supervision of AS/A-level Computer Science: Section 6 p115 [\[LINK\]](#)

AQA GCSE Computer Science: Section 5 p35 [\[LINK\]](#)

AQA Level 3 Technical Level IT: CYBER SECURITY Section 15.5 p179 [\[LINK\]](#)

Bob Harrison article on online teaching with links to others [\[LINK\]](#)

Cambridge Nationals Newsletter [\[LINK\]](#)

Cambridge Technicals and Nationals: students producing work from home [\[LINK\]](#)

Emergency Remote Teaching research Jane Waite [\[LINK\]](#)

JCQ Information for candidates using social media [\[LINK\]](#)

JCQ Instructions for conducting coursework [\[LINK\]](#)

JCQ Reviews of marking (Appeals) [\[LINK\]](#)

NCCE Planning and reflecting on distance learning [\[LINK\]](#)

OCR advice on authentication [\[LINK\]](#)

OCR getting updates [\[LINK\]](#)

OCR webinars [\[LINK\]](#)

Pearson BTECs Centre Guide to Internal Assessment [\[LINK\]](#)

Raspberry Pi research on remote teaching [\[LINK\]](#)

Research on remote learning from The Education Endowment Foundation [\[LINK\]](#)

Keeping Watch

Extract from, JCQ document found on CCEA [\[LINK\]](#)

Keeping watch on content

You should check a candidate's work for acknowledgement of sources as the work is being completed. Particular care should be taken when candidates submit work without completing intermediate stages.

Varying quality of content is one of the most obvious pointers. Well-written passages containing detailed analyses of relevant facts alternating with poorly constructed and irrelevant linking passages ought to give rise to suspicion.

Another practice is for candidates to write the introduction and conclusion to an assignment to make it fit the question, and then fill in the middle with work which has been lifted from elsewhere.

If the work is not focused on the topic, but presents a well-argued account of a related matter, this could be a sign that it has been used elsewhere. The same applies if parts of the work do not fit well together in developing the response to the assignment.

When candidates submit completed work without intermediate stages this can be an indication that the work is not the candidate's own.

Dated expressions, and references to past events as being current can also be indications of work which has been copied from out-of-date sources.

Keeping watch on vocabulary, spelling and punctuation

The use of a mixture of English and American vocabulary or spellings can be a sign that the work is not original.

If the piece contains specialised terminology, jargon, obscure or advanced words, the teacher should ask if this is typical of this level of candidate and reasonable, or is it because the candidate did not write the passage.

Is the style of punctuation regular and consistent?

Keeping watch on style and tone

Look for differences in the style or the tone of writing. If a candidate uses material from textbooks alongside items from popular magazines the change of tone between the two should be marked.

Look at the level of sophistication of the sentence structure. Is this the sort of language that can be expected from the candidate? Is the use of language consistent, or does it vary? Does a change in style reflect a change in authorship at these points?

Keeping watch on presentation

Look at the presentation of the piece. If it is typed, are the size and style of font uniform? What about the use of headers and subheaders? Are the margins consistent throughout? Does the text employ references and if so is the style of referencing consistent? Are there any references, for example, to figures, tables or footnotes, which don't make sense (because they have not been copied)?

Lack of references in a long, well-written section could indicate that it had been copied from an encyclopaedia or similar general knowledge source.

Look out for quotations that run on beyond the part which has been acknowledged.

Lessons from Higher Education

Several colleagues have described approaches that have been tried with undergraduates for setting texts and examinations to reduce the opportunity for malpractice in the absence of rigorous proctoring.

These seem suitable for use by schools where there are systems of control and monitoring of online activity such as Google Classroom, Microsoft Teams or the like.

Many universities have licences to use Turnitin and students can submit their assignments directly to the plagiarism system. The tutors can mark within the system using assessment rubrics. Most importantly, tutors have access to similarity reports indicating where text has appeared elsewhere. The tutor still has to make the decision whether this is legitimate copying (citation/quotation) or use of common language phrases. The similarity percentage might indicate plagiarism.

Online proctoring can be challenging. The use of cameras and screen viewers has high bandwidth demands. Rigorous monitoring requires a lot of human input. The knowledge that both video and screen monitoring is taking place will ensure the majority of learners will not commit malpractice. The recordings can be scrutinised afterwards if there is other evidence or concern regarding malpractice.

Online delivery of test/examination material makes it easier to:

- deliver different questions to different learners
- deliver the same questions but in a different order to different learners
- deliver modified questions to different learners (the modifications need not change the substance of the question but the context)

Monitoring in real time the screen/keyboard activity of individual learners as they are carrying out an assessment activity also gives a higher assurance of authenticity of the submission.

Closing thoughts

We must be careful to protect our positions as teachers by reducing the likelihood and possibility of learner malpractice.

This can be done through:

Promote positive and constructive citation strategies to ensure all learners respect the work of others and feel that it is wrong to misrepresent the work of others as their work.

Knowing our learners and their abilities and so being able to recognise work that is outside of the normal pathways of progression or styles of presentation.

Being aware of and following the advice, requirements and regulations of the Awarding Organisations. Accessing the appropriate social media or authoritative website is important - requirements may differ across different qualifications.

This report was produced from contributions made by members of the Assessment working group and comments made in CAS Community forum threads.

CAS Assessment working group

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