

Generative Artificial Intelligence Consultation Practitioner Focus Groups

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Executive Summary

- 33 education practitioners took part in discussions around the implications of GenAl use in education and assessment; what support and guidance was needed for the technology to be integrated into learning and teaching in Scotland; and practitioners' views on SQA's position statement on GenAl use in assessment.
- Participants included 16 schoolteachers, nine college lecturers, and eight other education practitioners.
- The primary challenges discussed were the potential for GenAl to de-skill learners, determining the authenticity of learners' work, and lack of awareness and knowledge of the strengths and weaknesses of GenAl tools (ie bias in Al-generated content).
- Practitioners also highlighted that the ability to critically evaluate the credibility of Algenerated content presented an opportunity to cultivate new digital literacy skills among learners, which practitioners also felt should be reflected in education and assessment in the future.
- Practitioners generally felt that acknowledgement of how GenAl can be used to support learning should be reflected in SQA's position, and that clear guidance was also needed as to how GenAl could be used in each subject area and to what extent.
- Practitioners strongly felt that while SQA had a role in providing guidance around use of GenAI, there was a need for joined up action across the sector, with a clear and consistent unifying message coming from national level.

Introduction

This report represents an analysis of Generative Artificial Intelligence (GenAI) Consultation focus groups that were carried out during August and September 2024. These focus groups represent the second stage of SQA's consultation with practitioners on the use of AI in education, following the <u>Generative AI Consultation Survey</u> in November 2023. In these focus groups, in-depth discussions were facilitated around SQA's position on the use of generative AI in assessment to provide evidence to inform the development of SQA's position statement moving forward.

Methodology

In total, 33 practitioners took part in this stage of the AI research. These practitioners were recruited from the 2023 survey, indicating that they were interested in taking part in future GenAI-related research. This stage involved focus groups, which took place between August and September 2024. Each focus group lasted about an hour. Two participants were unable to attend focus groups, so a 1:1 interview was carried out instead for both. The focus groups consisted of three to four participants, who were schoolteachers, college lecturers or other educational practitioners, as well as two facilitators from SQA's Research and Evaluation team. The sample comprised sixteen schoolteachers (48%), nine college lecturers (27%) and eight other education practitioners (24%).

Focus groups were conducted online via Microsoft Teams and were recorded. Following each focus group, transcriptions were checked to ensure that views were accurately captured.

The findings from the focus groups were analysed thematically using NVivo. Where quotes have been provided, these have been edited where necessary to correct typographic errors and to protect the anonymity of the participants.

Findings

1 Challenges

Practitioners were asked what challenges they felt were posed by the integration of GenAl into Scottish education. The discussion around challenges tended to focus on loss of skills and learning; authorship and authenticity; and lack of knowledge about the technology.

De-skilling

Substantial numbers of practitioners highlighted the potential for GenAl to 'de-skill' learners and encourage them to 'take the easy way' in regard to their learning, thereby creating an overreliance on GenAl at the cost of original thinking.

'...it's going to take away some of the research skill, there's going to be a diminishing of skill overall.'

'My concern though with that is we're not going to have anyone be able to come up with their own ideas in the future if we're putting it in the curriculum to use AI to generate ideas or use AI to generate a framework [...] All my students, they just want, tell us the easiest way to do it.'

Determining authenticity of work

Another key challenge mentioned was the impact of GenAl tools on the authenticity of learners' work and determining whether and to what extent GenAl can be considered a co-creator. Within this, the inability to detect whether learners have used GenAl in their work was cited as a concern.

'I do think one of the biggest challenges we're facing is obviously the threat to how credible is the work that's being produced by learners, how much is theirs [...]?'

'If you use AI to give you the germ of an idea, how much credit does the AI get with that?

Some teachers described having uncomfortable conversations with learners when they suspected that GenAI had been used and not admitted to. This made practitioners concerned about the GenAI adversely affecting their relationships with learners through a breakdown in trust.

'It affects your relationships with your candidates [...] It's just kind of that, almost awkwardness of if you ask someone, have you used AI for this? And they come back to you and say no, but it's very clear [...] how do you bridge that?'

Alongside this concern, practitioners mentioned the challenge around not having a way to detect use of GenAI.

'It's just we don't have a mechanism at the moment to sort of pinpoint and say, "by the way, that paragraph is specifically, you know, Open AI".'

'I don't know what the answer is. If we were given the tool, if the generative websites would actually give us the tool to definitively prove that it has been written by AI so that pupils couldn't argue with it and we wouldn't be in that uncomfortable situation where we're accusing them of lying because we could just prove it.'

Lack of knowledge

Lack of learner knowledge or awareness around the validity and quality of GenAlgenerated content/outputs was also a common concern.

'I don't think our young people have got a clear understanding of bias or a clear understanding that AI is not telling the truth. There's something about, you know, not understanding what AI does or how it thinks. So they don't understand that there's bias in the system. They don't understand that it's not a truthful answer. It's an AI answer.'

Regarding practitioner knowledge and awareness of GenAI, a few comments suggested that some viewed GenAI as a passing trend and were therefore less willing to engage with it.

'[...] some teachers like it and others are like, yeah I can go through my whole teaching career without ever opening that. And that's what I think AI is viewed as, it's more of a, it's something that will come and go. It's like, I don't need to use it.'

Other challenges

It should be noted that several other challenges were discussed, including the rapid speed at which the technology is developing, inequalities, lack of attention to data handling and GDPR, and limitations to access due to age restrictions and paywalls.

Rate of technological advancement

There was a sense among practitioners that the education sector was not responding quickly enough to the rapid development of GenAl technology.

'We absolutely need to take the bull by the horns and we need to get moving on this. But we're still kind of talking about it, right? Nothing feels as if it's moving quickly enough.'

'The threat is the speed at which, in my particular area [technology], things are changing and it's a reaction time problem. Things are changing so quickly.'

Inequalities

There was an emphasis from some practitioners on how GenAI had the potential to further exacerbate the attainment gap. Practitioners explained that some learners, particularly those from more affluent backgrounds, may have greater access to GenAI tools than others.

'Actually, what we're also experiencing is a digital gap...so many of our children are trying to access learning on a phone and don't have access to a laptop, often don't have access to Wi-Fi in the home because it's all mobile data. [...] I'm really conscious of the fact that we'll leave a lot of people behind and we need people to come with us.'

"[...] because our SIMD profile is pretty low, so computer access, internet access at home is quite limited- and we are concerned that learners could be disadvantaged and the attainment gap would widen because a more affluent home could get more support with access to Al."

However, participants also perceived some tension between the potential for AI to reduce inequalities and the potential for GenAI to create further inequities.

'So to some extent AI can almost level the playing field. For those students, you know, it can give them that support that they don't get from home. But then equally we've got the issue where when we look at it, most sort of middle-class families are using ChatGPT. Maybe our young people from more deprived areas haven't got access to that. Certainly, haven't got access to a paid version, so we're creating a division there in terms of what digital access people have to AI.'

Lack of attention on data handling and GDPR

A few participants raised the concern that data protection was not receiving enough attention in discussions around the use of GenAI.

'So we know that schools are thinking, wow, this is going to be able to do some amazing data analysis. It gives me the fear. I do say to them, and it's in the guidance, you know, about do not put any identifiable information in about your school and the local authority, obviously any data about pupils, and so on and some of them will say, oh no, we anonymise it. Honestly, it gives me sleepless nights to think about what is maybe getting put into these models...so yeah, that whole area is massive and I just feel as if it doesn't get the spotlight.'

Access in schools and limitations to safe use of GenAl

Some practitioners said that their ability to integrate certain GenAl tools into learning and teaching was hindered by obstacles such as age restrictions and paywalls.

'And again, looking at students, you know, why are these tools over-18? Because a lot of it is the dearth of the Internet. And you can ask it things and it's going to tell you quite convincingly some rather nasty things potentially and our under-18s, should they be exposed to that, you know...there's not a safe search on Open AI. And Copilot, there's not a safe search and Google Bard and hence why it's not available to schools because of that.'

'Al...it doesn't have access to the online content, everything's behind paywalls. So it's basing it on substandard sources, which I wouldn't allow my students to reference anyway. It costs money for materials and so the AI is using materials that are vitally available but they're no good.'

2 Benefits

Practitioners mentioned three main potential benefits to using GenAl in education: reduced workload; enhanced learning; and support for those with additional support needs.

Reduced workload

The main benefit of GenAl voiced by practitioners was the time saved by generating learning materials with GenAl. Practitioners felt this had the potential to reduce their workload.

'I think one of the big opportunities is the kind of time-saving aspect so that, you know, things can be generated quickly and learners and teaching practitioners can use that as a starting point.'

'There's potential in generative AI to actually make teachers' lives easier in some ways and potentially for pupils too ... for example, you could plug in a 200-word passage and say could you give me a multiple choice quiz on this and it quite quickly can save you a lot of time and energy ... so there are definitely some positives for us that could potentially make our lives easier.'

Enhanced learning

Practitioners also specifically considered benefits of GenAl for learners. This included the ability to generate ideas and study tools; structure an essay; and provide a map, template or framework. There was also a feeling that learning to use GenAl at school would help prepare learners for its use in future study and work opportunities.

'I think helping them lay out the foundations ... so how do we get basic headings, subject sections, images, you know, the layouts. I think that's a really big part of what they're missing from the school jump to the professional part. So using the models to frame that out rather than fill out content. I think that's quite different, content versus mapping framework.'

'Absolutely the opportunities around that support to creativity, when you're staring at that blank piece of paper and you just don't know where to start.'

'So by not integrating this we are then not teaching them the kind of skills that they're going to absolutely need as they move on to further and higher education and absolutely into the workplace. So we're doing them a huge disservice if we don't change.'

Supporting additional support needs

Practitioners also felt that GenAl had the potential to benefit learners with additional support needs.

'Where the use of AI may become accepted if it was an academic support platform in terms of any students or pupils with additional support needs...'

'I think it can be helpful for some of our neurodiverse young people as well.'

3 Implications of GenAl

As identified in the 2023 consultation survey, practitioners reiterated in the focus groups that GenAI was here to stay.

'[...] this is not a fad; this is not going anywhere [...] so we've got to take that on board.'

Considering the challenges (and benefits) mentioned by participants, a question was asked about what would need to change in the Scottish education sector given the likelihood that GenAI will change the landscape. The future of assessment was a common theme.

Assessment formats

Several practitioners called for a complete overhaul of assessments. This seemed to stem from a belief that assessments needed review and refreshment regardless of GenAI.

'I think the reason I feel a bit stuck and conflicted is because I don't actually think the assessments are right. I don't think the way in which the assessments are done are right. So I think the whole thing needs to change to be in line.'

'I don't think for one minute that they should be banned from using AI in any kind of form but I think we'll need to start looking at assessments again to maybe get oral verification and what they're speaking about, do they know what they're writing about? Assessment have got to change...'

Several practitioners felt that current assessments overly valued rote learning and that, in the future, assessments would need to allow learners to better demonstrate their higherorder thinking skills. To change assessments, practitioners called for a review of what the assessments are ultimately aiming to achieve — though they acknowledged that this may require an attitudinal shift in pedagogy and educational values in Scotland.

'I think we'll have to look at a wholescale change in attitude towards assessment to, what are we assessing? Are we assessing someone's knowledge of something or are we assessing how they can articulate that knowledge in that assessment situation?'

'In terms of what is the goal of education, is it to make sure that pupils, you know, have a series of arbitrary things memorised or is it an ability to use those ideas to solve new problems or to be able to interact with AI so that it can solve the problem you're actually asking it to fix and not just its misinterpretation of the problem?'

'I think we have to now look at what we are trying to achieve when we're assessing...we need to move away from this idea that we're testing their memory. That's not what it's about anymore. That's a pointless exercise [...] It's about the interrogation of data. It's about their analysis of it. It's about using the tools to improve their output and being able to continually evaluate that as well.'

In light of this call to change assessments, suggestions were given for more practical types of assessment format that would be more conducive to incorporating GenAI, and practitioners suggested ways of acknowledging use of generative GenAI in assessment to different extents. For example, some participants proposed the use of an GenAI scale, such as the <u>AI Assessment Scale</u> proposed by Leon Furze.

'For our degree courses, we are looking at redesigning assessments to incorporate and to acknowledge AI to different varying levels. That's definitely where the HE sector is, looking at AI scales of where, how much AI can be used, which has its own problems, we're just piloting that right now with a few courses.

Other suggestions were geared toward ensuring that learners could demonstrate their abilities while acknowledging their use of the technology in the learning process by explaining how they had used GenAl to develop their own thinking.

'...do we want to become really conservative and say let's just get rid of any inclass assessments, in-class work only, you know, let's go back to paper exams and never touch anything, probably not the way for the future in terms of business? Or do we want to kind of try and embrace and work with generative stuff and maybe ask more questions of explanation of, you know, okay here's your code explain what this bit does?'

'...when it comes to something like the Advanced Higher [computing] project...and it's a full software development project, you know, at that level then pupils are going to use it as a tool and including it in their test logs and showing how they use it [...] would be far more effective than hiding it behind closed doors...'

However, there were also some who felt that the traditional, closed-book assessments were the only way to ensure trust in the assessments. Additionally, there were some subject areas where it was acknowledged that integrating GenAl into assessment may not be appropriate.

'We have multiple closed book assessments throughout the year to act against learning outcomes for units and things like that that they need to pass. Now, it's almost archaic but we have to have that layer of trust in it.'

'But just like how some teaching of maths is done with a calculator and some is done without a calculator, going forward some classes will be done with AI, some will be done without AI.'

Malpractice

Amidst discussion of how assessments might change, practitioners also acknowledged that the potential for malpractice would have to be considered but that this was nothing new. Many suggested that SQA provide more clarification around what constitutes cheating and/or plagiarism specifically in regard to GenAl use.

'I think cheating's not new. We've always had to have checks and balances in place to ensure that exams were done in a way that was fair and they had integrity. This is just another way that perhaps it could be misused. That doesn't mean to

say we just try and lock it down and not use it at all. I think again it allows differentiation.'

'One of the biggest challenges is we need to quickly get over this idea that using ChatGPT is cheating. That then makes it all secretive. It makes it all, you know, they're all doing it but nobody will admit to doing it...whereas, at the moment, if we get over this, it's not cheating, we are going to talk to you about the ethics. We're going to talk to you about it in the same way as that just copying stuff off the internet doesn't help your learning. Well copying stuff off ChatGPT won't ultimately help your learning. It's about understanding it and critically appraising it.'

'I think it would be good for SQA to say, "here's what we classify as plagiarism and cheating" as part of that AI message and, students always get their expectations at the beginning of the year, we've updated that to include sort of like plagiarism, cheating, copying and pasting and all that stuff, the use of AI to generate assessment work, you know, so it would be quite good for the SQA to maybe tighten the terminology that goes with what is cheating to include AI.'

4 Practitioner support needed

Practitioners voiced that guidance and training was needed, as well as transparency across the education sector so that examples of GenAl use in practice could be more widely shared.

Guidance

There was a strong appetite among practitioners for more guidance. This included guidance that was subject-specific and empowering for teachers, as well as guidance that focused on detection.

In terms of subject specific guidance, practitioners wanted to know:

- what kind of GenAl tools were appropriate to use for their subject area
- how these tools can be used to support learning
- how much use of these tools is acceptable
- what are the risks and opportunities of each tool

'They [teachers] don't know how to begin this whole journey because they don't know what the tools are. They don't know what they do. They don't know where the opportunities or the risks are.'

There was some acknowledgement that guidance around GenAI use needed to empower and upskill teachers and that this may need to be differentiated considering the level of digital skills that teachers held.

'I really believe that it's empowering individual teachers that would make a huge difference.'

'That will have to be differentiated though because we've got staff who are still, the digital skills are so poor.'

Continuing Professional Development (CPD)

Practitioners expressed views around training and continuous professional development (CPD) opportunities. One practitioner stressed that it was important that they be given sufficient time to learn how to integrate the technology. Several practitioners felt that this had to be done in a more meaningful and impactful way than simply, for example, taking an online module.

'One of the best supports you could give us is time. A day. Go and let us sit and play around with things on your own to see how they work. Because for me, unless you play around with a platform, you don't understand how it works.'

'I don't think online modules are necessarily going to work.'

'If teachers were trained on how to use this tool but trained properly, not just, here's a booklet, go and read it and see what you can take from it. Or here's a PowerPoint and someone's going to talk through for an hour and then that's somehow going to give you all the tools that you need to get your head around AI. I think it's, just about the workshop that we [did], we physically used three different types of software and got to see for ourselves how it can be used.'

Some practitioners shared examples of helpful CPD or training opportunities they had attended externally, such as this example from a social sciences practitioner who attended a training session led by Daydream Believers:

'It was all social subjects teachers at one training event and it was how to apply Al in specifically social subjects and that's what was fantastic because when we do any sort of training, like for example decolonising the curriculum, it's like you're trying to teach it to all subjects and all teachers and how can they do that? It's very difficult for maths or science to figure out how to do that. So tailoring Al per department and subject I found really beneficial.'

Other external organisations mentioned that provided training included:

- Learn Worlds
- Wolfram Alpha
- JISC

The need for transparency and case studies

Practitioners expressed that more examples, or case studies, of how GenAI was being used across subject areas would be helpful and that this required transparency across the sector. This links to comments made by practitioners who felt that SQA had a role in sharing examples of GenAI use in practice, which is expanded on in the next section.

'A lot of the NQ courses in the course specifications have got examples of learning and teaching methodologies or activities that you could do to cover particular content and different courses and some were really good and detailed...having something like that maybe for an even playing field for AI where gathering everyone's thoughts of how AI is being used in different subjects, here's examples so that it's shared with everybody as opposed to a small group could be a really good way to support...so everything's transparent.' 'I think it's important that everybody's willing and open and transparent about disclosing what different AI tools they're using, so it's not under the radar. It's not seen as a secret or something that's to be covered up, you know, it's to use the AI that's there in the best possible way.'

5 Who is responsible for governance of AI?

For the most part, practitioners expressed that the governance of GenAI in Scottish education needed to be a joined-up approach across public bodies, including SQA, Education Scotland, Scottish Government, GTCS, initial teacher education and the local authorities.

Views on SQA's role

There was a general agreement among practitioners that SQA should be responsible for the use of GenAI in relation to assessments and qualifications, while Education Scotland should have oversight of the use of GenAI in teaching and learning within the curriculum. In addition, practitioners felt that the local authorities, as well as employers and other professional bodies, should be involved in the implementation of GenAI in teaching and learning.

'If it's relating to content within particular courses and qualifications, then it would be the awarding body of that qualification. If it's about general kind of teaching practice and the way different organisations are using the materials, it could be professional bodies and different employers.'

'I think SQA's role is to kind of stipulate, I suppose, the dos and don'ts of AI in terms of exams and assignments, really.'

'I think the SQA should solely be focused on assessments...where local authorities, schools should maybe be more focused on pedagogies that work with it and that's where Education Scotland would tie in.'

'The SQA needs to do training in terms of what they'll accept for the assessments. But then the local authorities, Education Scotland need to put out training in terms of how we can use that within the classroom environment in terms of pedagogies. Because I don't, it's not down to the SQA to tell us how to teach.'

'I think certainly sort of Education Scotland in terms of Scotland's curriculum and the four capacities and citizenship, they're working on all of these different aspects...we need to make sure that we've embedded these skills throughout and there is always mention of how AI contributes towards that theme or strand. So absolutely for Education Scotland in terms of the overarching curricular input.'

A small number of practitioners, however, felt assessments and qualifications were not the SQA's sole focus, and that the organisation was best placed within the sector to bring practitioners together and provide practice-sharing opportunities.

'...the SQA have oversight of everybody, so you know sharing that, if there is really good, strong practice and evidence of it [AI] in an assessment, that being shared or conversely if there's evidence of it being used poorly so others know, not

necessarily who that was but you know not to fall in the same mistakes, would be really good information from the SQA to share.'

'I think the SQA historically, rightly or wrongly, have always seen themselves as just the assessment provider. They just provide the exams, they provide the marking, they provide the course content and everything else is left to pedagogy. That's Education Scotland's board, you know, subject network of teachers. The reality is, from decades of cuts to education, there are no subject networks [of] teachers. I think a lot of people are looking for the SQA now because the SQA has or well theoretically is able to in touch with every subject teacher in the country and say, for example, 'physics teachers of Scotland, how are you using AI in physics?' and collate that. It's probably more appropriate as a subject network but I just don't think they exist anymore.'

'But I think there's a lot of teachers [are] very isolated. And so I think that's why we [are] kind of looking to the SQA because the SQA is the only kind of body that is uniting us.'

Additionally, most participants said that SQA should provide more guidance on what can be considered acceptable use, particularly for each subject area.

'Yeah, I mean, I'm almost thinking like a kind of Understanding Standards: This is what's a good example of something...and this is a not so good example or a not permitted example or something like that because sometimes it is helpful just to see an actual kind of worked example of what's okay and what's not okay I suppose.'

'It needs to be a no, nothing is allowed [or] you're allowed to use this for this course or this for this kind of assignment. This is acceptable for design but you must be able to say I used AI to create this element of my project, I used AI to refine this element of my project.'

'It would be good if SQA was saying something along the lines of, here's how you ensure student or pupils are using it effectively. Here's how you man the gates of cheating and what not...so, very clear and specific guidelines on what you can accept and not.

One participant described a unit that could be created to educate learners about GenAl and felt that such a unit would have more power coming from SQA than a unit devised by for example, an individual centre.

'I do think that SQA could devise the unit there. There's more power in it coming from SQA than it is being a locally devised unit...when you say this is an SQAdevised unit, they take it more seriously as learners because they know it well...if we're doing that on a national scale it then becomes part of the national conversation. People are more aware of it... we're all singing from the same hymn sheet."

Top-down versus bottom-up policymaking

When asked if governance of GenAl should be at the local level or from a national level, most practitioners felt that top-down clear and consistent messaging would have greater impact.

'We need the national voice. Because without that, it- it's only being pushed from the bottom up, that's a much heavier load almost to try and breakthrough whereas, if there's recognition at national level that no, this is something we absolutely need to now be looking at.'

'It's a real challenge to get that out there, which is why at local authority level we really need that support nationally as well to push it up the agenda a little bit.'

An alternative view was that teachers should be at the centre of decision-making around GenAI governance and that this would be better achieved through a decentralised approach, but not at the expense of consistency.

'I don't think national level because then it gets too political. I think it needs to come from bottom up and I think it needs to be run by classroom teachers. No one that is in senior management or like, council positions or any sort of politically affiliated person. I think it needs to be some sort of working group of teachers who are from a range of different schools, with different sort of subjects, backgrounds, essentially coming together to kind of roll this out.'

'I don't know if maybe creating some sort of national, like standard or something that therefore all schools will be following the same guidance or at least the same protocols.'

Some practitioners called for an evidence-based approach to governance of GenAI.

'Organisations like the OECD I'm sure are doing different kinds of comparisons across different countries. So we could pull resource to see if there's, you know, different kinds of research activity that could help inform the governance aspects and the good practice aspects.'

6 Views on SQA's position

The discussion around SQA's position statement raised questions around the use of GenAI for both learning and assessment. Referencing was also raised, as a key aspect of SQA's position statement, as was malpractice, which was expanded on above in relation to implications on assessment.

GenAl use to support learning

The majority view on SQA's position was that it needed to acknowledge when and how GenAI could be used to support the learning process.

'I just think we need to be more dynamic and I think at the moment, initially everybody's put the stoppers in going, no, we can't use this because we didn't know what it was capable of. But now we're starting to understand the parameters in which we potentially can use it. I think it's important that it evolves to match that because I think we have to embrace it.'

'I agree 100% that the position has to change. It's not sustainable ... They're going to be using it. We want them to use it safely, securely, in a rich way ... yeah, they can pick up the wrong information from websites. It's their responsibility to check what they are writing is accurate and correct and valid. And if it isn't, they get marked down for it, that's the whole point.'

'I think we ought to change the statement and say that AI can be used and that we should have a framework therefore using it. So we need to be able to say yeah, you can use the generative AI but if the information on there is rubbish or it's not at the right level then you lose marks in the same way you would have lost marks if you had a textbook in front of you to write that part out.'

GenAl use and assessment

While it was generally seen that GenAI should be allowed to support learning, a point was also made about this aligning with use of GenAI in assessment.

'...if we have to teach them to use it in class, it's quite a difficult thing to then be like, but you cannot use it at all in any assessment or assignment. I think probably getting that balance right...'

However, there were a number of practitioners who felt that the current approach was fair in terms of not allowing GenAI use in assessment. Additionally, there was some differentiation in views on SQA's position by subject area. This was in relation to teachers of, for example, English and social sciences, where there was concern around separating generated content from candidates' own work in essays or folio work.

'Again, it's going to be different for different subjects but for us, for that folio, I agree with SQA's position. It just shouldn't be used at all ... I don't mind it for generating ideas to get them started. I don't mind if they're like, can you help me find a study that proves x, y, z? In that case, the source isn't ChatGPT, the source is the study. It'll direct them toward the website that has the study on it and they just reference the study. But it just shouldn't be, I completely agree with that position, it just should not be used at all if it has been used to generate something, it's been used to generate a sentence or assemble a paragraph, whatever you have copied down, that is not your work ... For our subject, for the folio, it should, it can be used to generate ideas. It can be used to point you toward things and help you find things. It should not be used to generate any part of your essay, any, any wording in your essay whatsoever, because that's not your work.'

'It's just really getting across the idea to them that you cannot use AI to write an essay for you. You can use it to do this, this and this [but] you can't use it to [write an] essay for you.'

'I would say from a very narrow focus of English media I am happy if the current model is no AI because if we are being asked to assess their writing skills, I don't want to be sitting marking something that isn't actually their work.'

'When it says that's for assessment, so that can be understood if you're handing in a piece of work that contributes towards an overall grading or a pass/fail. But when it's portfolio type assessment, when people are building up their understanding of the learning that they're participating in then ... I think there's potential for that to be misinterpreted or used in a way that's not fair for either the student or the marker.'

Referencing

There was a general sense among practitioners that referencing GenAl should be allowed to some extent in the interest of transparency.

'I think there should be something along the lines of how you can reference AI within a piece of work or a report just so it allows you to then be transparent about the whole thing.'

Some tools, like ChatGPT, claim that AI-generated content is the intellectual property of the user, and this warrants consideration, as mentioned by this practitioner:

'ChatGPT are very clear. Anything generated is your intellectual property. It's notthat can't be plagiarism. But whether or not that means, you know, go ahead and use it ... but if it's wrong, then you'll be penalised ... is as far as we should go. Or if it's more, AI is a valuable tool, but we don't recommend it due to its [in]accuracies. Maybe that's more of a conservative approach to say you're not banned from using it, but you're probably not doing very well if you do. Or maybe it's more, we recognise that AI can be a useful tool for generating ideas ...'

7 Support for learners

In terms of support for learners, practitioners emphasised that learners needed to be educated about responsible GenAl use. Issues around implicit bias and ethics were raised.

'The primary challenge and main opportunity is responsibility for their own learning. That's what we want to do as teachers, if we can instil in them a sense of responsibility for their own learning, we've done our job ... and AI gives students the tools to do that. If we teach them how to do it. The difficulty is if they don't take responsibility for their own learning, they can use AI tools to circumvent to get around having to learn anything.'

'The bias that's built in ... what voices are underrepresented in this response ... the ethical considerations ... we need to be having discussions around that.'

Participants also called on SQA to provide clear guidance for learners on what constitutes malpractice and what is acceptable use of GenAI.

'... we already ask them to sort of reference sources and talk to them about plagiarism and what that means. I think the definition of plagiarism needs to be clearer to include AI and I think we need to be clear about what AI use is acceptable.'

Practitioners felt that the ability to appropriately evaluate and the outputs of AI tools was an emerging skill. It was believed that teaching GenAI tools to be used ethically would be an opportunity to enhance learners' digital literacy by developing their skills in prompting, iteration, recognising bias, and understanding citizenship.

'They need to – for me it's that understanding of what it is, what it can do, what it can't do, what the bias is within the system so that they've got a really good grounding in it before they're really using it a lot.'

'They can get on and they can use it but the ethical use I think needs to come through citizenship. And I think to some extent it's already embedded through the Curriculum for Excellence ... within the four capacities. I just think we need to extend the definitions of some things outwards to include the virtual world and to include sort of the AI tools.'

It was also acknowledged that not teaching learners how to use GenAI early, and assuming they already knew how to use it, was detrimental to learners and wider society. Yet, perhaps surprisingly, some practitioners suggested that not all learners are openly embracing GenAI. This may be due to a lack of understanding around the technology, as suggested by one practitioner:

'From my point of view, the challenge is actually getting students to know what it is and how to interact with it ... [a] surprisingly low number of my students actually understand what AI is.'

'But they're not using it. When I show them what they can actually do with it, they're like, oh dear god. But they've no idea.'

Additionally, there were comments around the need for parents to be educated on what is acceptable use of GenAI so that they can better support learners at home.

8 Communications and networks

The majority of practitioners called for opportunities to share best practice in GenAI, or outlined their positive experiences in sharing best practice:

'We're just starting this year to look at starting a group within the school to look at AI and the use of AI in the school. So that's starting this year, the first meeting's going to take place in September. We're also looking at possibly investing in some teacher software which will assist teachers using AI to help it ask questions.'

However, whilst practice-sharing opportunities were called for and encouraged, there was also a recognition that communications around these opportunities, and GenAI use in education in general, had not been co-ordinated or coherent. There were widespread calls for messaging to be both unified and centralised.

'I think you have to have some central group saying ... here's what we need you to all do ... I don't think we can rely on the information filtering down in every centre because not everyone's going to see it, I don't think.'

'So that messaging, I think, has to come from Education Scotland. It has to come from SQA, it has to come from the local authorities. It has to come from the leaders in their school to reassure them that this is okay.'

These calls were made often in recognition of GenAl practices being different between areas and centres, and even within centres. This was again emphasised by practitioners' experiences of GenAl champions. Some shared their positive experiences of either having or being a GenAl champion, whilst others called for them and stated the urgent need for them throughout the whole sector:

'We need to have AI champions because there's folks who have really got their head around this ... So finding a way of spreading those pockets of finding and locating our expertise and spreading it, I think is maybe the key to speeding up this transition.'

'If you've got a question, we know exactly who we need to go to about AI and things like that. So we're really, really lucky and that maybe isn't the case everywhere.'

Whilst referencing communications, networks and the dissemination of knowledge and good practice surrounding GenAI, practitioners referenced previous rollouts of IT across the education sector:

'[...] that was an absolute nationwide push. That was every level.'

However, some participants did note that teacher workload meant that they did not have the time to engage fully with the communications or CPD that had been shared with them. This voluntary training can compound the inequalities that varying GenAI use can present, as outlined above in this report.

Implications for SQA

Practitioners feel that SQA's position on GenAl use in assessment needs to change. Many practitioners interpret this as a blanket ban on GenAl use in education, rather than just in assessment. Practitioners feel there is a need to 'open up' whilst still protecting the integrity of assessment. There were differing views on how to do this, with some practitioners asking for a more radical review of what assessment is, with others calling for GenAl to be integrated into current assessment methods. There was also recognition that, to do this across different subjects, the guidance may have to become subject-specific to maintain the integrity of each subject's assessments.

Practitioners also called for a central voice and a leader on GenAl nationally. There were differing views on who they thought this should be, but there was a clear need for 'someone' to take a stance and fill the void that there is currently. It was clear that practitioners do expect SQA to take a clear stance on GenAl use in assessment, and for the current position to develop.

Conclusions

Participants recognised the challenges posed by GenAl but acknowledged that it is here to stay and is changing how learners engage with their education. Practitioners also called for the recognition of GenAl use as a new core skill.

Practitioners want guidance and training to enable them to support their learners for a future with GenAI. This is with a recognition that, without a coherent approach across the sector, learners will either receive an unequal education in GenAI, or no education in GenAI at all.

There were, however, some tensions within the discussions practitioners had that highlight areas for future consideration.

There was consensus that GenAI needs to be incorporated into education. However, there were differing opinions as to whether the integrity of current assessment methods can be maintained with GenAI incorporated, or whether there should be a re-conceptualisation of what skills are being assessed, with GenAI use being a skill in and of itself.

In addition, practitioners were encouraged by the prospect that GenAl could reduce inequalities within the education and assessment system. There was a recognition that some learners have always had parents or tutors to aid in their studies, and using GenAl well could mitigate those inequities. Although, access to GenAl (and internet connection in some areas) was raised as an inequity throughout Scotland. Some practitioners also raised that paid versions of GenAl tools had the latest technology, which could still lead to unequal opportunities for learners. Any policy on GenAl will have to take these differences in access into account.

This report will go to the SQA AI External Working Group as they review and adapt SQA's GenAI position statement for the 2024–25 academic year. The report will also be published on the SQA website. The next phase of Research & Evaluation and SQA's research on GenAI will look to engage learners on their views of GenAI use in education.