

# Consultation on a proposal for a Digital Learning and Teaching Strategy for Scotland



## RESPONDENT INFORMATION FORM

**Please note** that this form **must** be returned with your response to ensure that we handle your response appropriately

### 1. Name / Organisation

Title Mr ☒ Ms ☐ Mrs ☐ Miss ☐ Dr ☐ **Please tick as appropriate**

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### 3. Permissions

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**Please tick as appropriate**

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- (a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?

**Please tick as appropriate**

☒ Yes ☐ No

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Are you content for your **response** to be made available?

**Please tick as appropriate**

☒ Yes ☐ No

- (b)** Where confidentiality is not requested, we will make your responses available to the public on the following basis

**Please tick ONE of the following boxes**

Yes, make my response, name and address all available ☒

**or**

Yes, make my response and name available, but not my address ☐

**or**

Yes, make my response available, but not my name and address ☐

- (d)** We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

**Please tick as appropriate**

☒ **Yes**

☐ **No**

## Question 1

Is the strategy founded on the right principles? (Page 11)

Yes ☐ No ☒

Are there other principles that should be considered?

The strategy is built on 5 principles:

- Local leadership, national support.
- Partnership working.
- Opportunities for all learners.
- Evolution.
- Integration.

We have concerns with *Local leadership, national support; Opportunities for all learners; Integration.*

In some contexts the proposed balance between *Local leadership and National Support* will be problematic. An unresolved source of difficulty encountered by pupils who have additional support needs and/or disabilities, as well as their teachers and parents, is gaining access to the digital technologies with which only then can they access information and learning in order to demonstrate their knowledge and understanding. Reference to the Scottish Government “collaborating through providing guidance and support” weakens the statutory nature of much of that guidance. Despite national policy intention, access to ICT for learners with ASN across Scotland is unsatisfactory (*“there is significant variability in access to technology between schools in the same area and between schools in different parts of Scotland.”*<sup>1</sup>) and arguably is failing to meet legal obligations. In part the problems are due to division of responsibility but, in some important areas, national leadership would lead to substantial improvements and clearer commitments. CALL staff work in schools across the country, and currently there are difficulties balancing the conflicting perspectives of ICT network managers (sometimes referred to as “corporate IT”) with the needs of educators. For example, there is a need to achieve a balance between the requirements of Data Protection, eSafety, network security, and effective use of digital technology for teaching and learning. Local leadership is not achieving a satisfactory outcome in too many local authorities, and we submit that national government has a role to lead and give clear guidance to resolve these difficulties.

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<sup>1</sup> EXECUTIVE SUMMARY DISCUSSION OUTCOMES: ROUND TABLE EVENT RELATING TO SUPPORT FOR DISABLED LEARNERS IN NATIONAL LITERACY UNITS August 2014, Ashbrook Research & Consultancy Ltd

Second, the principle of *Opportunities for all learners* is misleading and open to interpretation. While we welcome the emphasis on improving outcomes for **all** children and young people, a strength of Equalities legislation and policy over the past 20 years is that it has resulted both in improved access for disabled people and other minority groups, and to a workforce that is better prepared to contribute to the national and international economy. A principle that is based on “opportunities” is different from that of equity, leading to equality. Equity **designs in** the impact of digital technologies at all levels – to digital hardware and software, to curriculum content and design, to awareness at initial teacher education level through to design and production of accessible products for wider market places. In contrast ‘Opportunities for all learners’ is comfortable with **designing out** large sections of its constituency. For example, giving all learners the same opportunities can result in the exclusion of some learners. Given that international and European law and policy will, over the next 5 years, increasingly force the hand of Governments, it is essential to establish the principle of equity or ‘equality of opportunity’ – that is, learners have the necessary tools to allow performance to match their competence.

With respect to **Integration**, the bar should be set sufficiently high to ensure that integration through open standards meets the outcome of equality of opportunity. Unless that is set out in principle, the impact of digital technology will not be realised for many in the community. There is clear evidence that, where open standards and the sharing of common services become aims or principles in themselves then they can lock out some of the population they are supposed to serve.

## Question 2

Are the four key themes identified the right ones to focus on? (Page 15)

Yes ☐ No ☒

Are there other themes that should be considered?

Yes. Scottish Government undertook independent evidence gathering that resulted in a literature review identifying five key **priorities** for education in Scotland (Question 1). The strategy is then based upon five **principles**. It is not clear how well the four **key themes** adequately reflect the five priorities for education, as shown in the accompanying table. We would like to see more clearly how the actions taken under the four themes will address the five priorities.

Five priorities for education	Four themes to ensure foundations
<ul style="list-style-type: none"><li>• Excellence through raising attainment</li></ul>	<ul style="list-style-type: none"><li>• Empowering <b>leaders</b> of change to drive innovation and investment in digital technology for learning and teaching.</li></ul>
<ul style="list-style-type: none"><li>• Achieving equity</li></ul>	<ul style="list-style-type: none"><li>• Improving <b>access</b> to digital technology for all learners.</li></ul>
<ul style="list-style-type: none"><li>• Skills for learning, life and work</li></ul>	<ul style="list-style-type: none"><li>• Ensuring <b>curriculum and assessment</b> relevance in a digital context</li></ul>
<ul style="list-style-type: none"><li>• Parental engagement</li></ul>	<ul style="list-style-type: none"><li>• Extending the skills and confidence of <b>teachers</b> in the appropriate and effective use of digital technology</li></ul>

It would be helpful if the four themes were more outcome-focused. The five priorities are likely to be both measurable and lend themselves to action planning and monitoring (though limited in the case of parental engagement because of a potential for intrusion).

For example, the question *how will we know...?* that equity has been achieved, is measurable. The corresponding theme 'improving access to digital technology for all learners' is less amenable to a measurable response to this question.

An outcomes focus would at a minimum be concerned with the purpose of improving access to digital technology.

The European Agency for Special Needs and Inclusive Education *ICT for Inclusion* project has developed a Policy Monitoring Framework<sup>2</sup> that we commend for developing measurable

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<sup>2</sup> ICT4I Policy Monitoring Framework, <https://www.european-agency.org/agency-projects/ict4i>

outcomes. The Framework is designed to monitor support provided to learners, teachers and schools to ensure a coherent system of accessible ICT policy and provision.

The Policy has four Policy Goals that can be aligned with the four themes:

Four themes to ensure foundations	ICT for Inclusion Policy Goals
<ul style="list-style-type: none"> <li>• Empowering <b>leaders</b> of change to drive innovation and investment in digital technology for learning and teaching.</li> </ul>	<ul style="list-style-type: none"> <li>• ICT infrastructure including AT &amp; AAC effectively supports UDL framework across schools.</li> </ul>
<ul style="list-style-type: none"> <li>• Improving <b>access</b> to digital technology for all learners.</li> </ul>	<ul style="list-style-type: none"> <li>• Each learner makes appropriate and effective use of ICT to access learning and demonstrate knowledge and understanding through assessment.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensuring <b>curriculum and assessment</b> relevance in a digital context</li> </ul>	<ul style="list-style-type: none"> <li>• All schools are able to implement and maintain an effective, sustainable UDL infrastructure contributed to using ICT.</li> </ul>
<ul style="list-style-type: none"> <li>• Extending the skills and confidence of <b>teachers</b> in the appropriate and effective use of digital technology</li> </ul>	<ul style="list-style-type: none"> <li>• All teachers make effective use of ICT to support learners with ASN.</li> </ul>

The strength of the Framework is that it identifies clear Objectives, with corresponding actions to monitor. For example, the table below shows how Policy Goal 4 (*All teachers make effective use of ICT to support learners with ASN*) is translated into three Objectives with corresponding Actions.

UDL and ICT at the teacher/classroom level: all teachers make effective use of ICT to support learners with ASN	
Objective	Actions to monitor <sup>3</sup>
<b>2.1 Attitudinal barriers to the use of ICT are understood and addressed through training</b>	<p>2.1a Teachers and support staff identify priorities capacity building e.g. by identifying GTCS professional standards, training priorities and support mechanisms.</p> <p>2.1b A comprehensive programme in ICT training (including universal awareness in AT &amp; AAC) is developed to address all teachers covering ITE through continuing professional learning.</p> <p>2.1c Coherent links exist between specific training in the use of ICT / AT/AAC and UDL.</p> <p>2.1d Tools to monitor the impact of such training are implemented.</p>

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<sup>3</sup> Actions scored as completed using the categories *None*, *Partial* or *Fully*.

UDL and ICT at the teacher/classroom level: all teachers make effective use of ICT to support learners with ASN	
Objective	<i>Actions to monitor</i> <sup>3</sup>
<b>2.2 Teachers are supported effectively in their general use of ICT to support learning, as well as the specific use of AT</b>	<p>2.2a Specific training is available for all teachers in using learner-centred teaching methods that are supported by ICT.</p> <p>2.2b Specific training is available for all teachers in maximising the use of accessibility features in mainstream ICT tools.</p> <p>2.2c Appropriate curricular materials are available to support teachers in their use of ICT to support learning.</p> <p>2.2d Appropriate technology-based tools are available to support teachers in their use of assessment for learning approaches.</p>
<b>2.3 Teachers are supported to use ICT as a tool for personalised learning</b>	<p>2.3a Specific training is available for all teachers in identifying learners' UDL / ICT preferences and then supporting learners to self-evaluate their own ICT access preferences.</p> <p>2.3b Specific training is available for all teachers in understanding the contribution of UDL / ICT to implement personalised learning approaches.</p> <p>2.3c Appropriate curricular materials are available to support teachers to use ICT to personalise learning.</p>

### Question 3

Do you agree with the priorities for action outlined in the 'leaders' theme? (Page 16)

Yes ☐ No ☒

Are there other actions that should be considered?

Yes. Access to digital learning for learners with additional support needs is uneven across Scotland<sup>1</sup>. Inequality exists at local authority level and also between individual schools, despite guidance from Scottish Government going back to 2002. For example, guidance from Scottish Government on *Planning Improvements for Disabled Pupils Access to Education*<sup>4</sup> published in September 2014 advises that "All school computers have text-to-speech software installed for reading documents and webpages." Yet a survey conducted by CALL in 2015 found that only 45% of practitioners reported having access to this software. In some local authorities (such as Glasgow, Highland, Dumfries & Galloway, Stirling, Moray, to name a few) we know that accessibility software and the free Scottish computer voices are readily available on all computers. But in others, this software is not and therefore some learners with additional support needs or disabilities cannot access the technology or digital learning.

Therefore we propose an additional priority for action to:

- Ensure that senior leaders are aware of legal obligations to provide access to the curriculum using digital technology, and support them to make provision.

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<sup>4</sup> Planning improvements for disabled pupils' access to education: Guidance for education authorities, independent and grant-aided schools, <http://www.gov.scot/Publications/2014/10/8011>



#### Question 4

Do you agree with the priorities for action outlined in the 'access' theme? (Page 17)

Yes ☐ No ☒

Bullet point 1 on developing standards and guidance should read:

- Collaborate with partners, including local authority education and corporate services to ensure that all existing statutory standards and guidance are implemented, anticipated statutory standards and guidance are planned for and inclusive design for learning underpins further developments.

A number of points lead us to recommend changing bullet point 1.

Firstly, our proposed changes to the wording again emphasises the need for the Strategy, and consequent Actions, to reinforce existing legal obligations to enable learners with disabilities access to the curriculum.

Secondly, we would draw attention to shortcomings with the Literature Review carried out on behalf of Scottish Government to inform the digital learning technologies strategy. The review notes that 'there is promising evidence that digital equipment and resources can help learners with additional support needs to improve their skills and competences in literacy and numeracy' (p.25); and quotes Higgins et al (2011) that digital technologies can be 'particularly practical for lower ability learners and those with special education needs...' (p.25).

These statement do not reflect the potential for digital technologies to be the game changer for learners with disabilities or additional support needs, to enable access to the curriculum or to raise attainment. By focusing on one group (lower ability learners, or more generally those with SEN), the report makes serious errors of omission. A lack of meta-analyses is cited but a major difficulty in obtaining meta-analysis data is that identifiable groups of pupils with ASN have not been considered, and neither has the contribution of digital technologies to these sub-groups, including:

- visually impaired or blind learners;
- physically disabled learners;
- learners with dyslexia;
- learners who depend on communication aids for personal communication.

The lack of attention given to learners with ASN in the Review is inexcusable given that this group constitutes approximately 20% of the school population. Omitting this evidence weakens the conclusions of the literature review as seen in summary of evidence (Table 5).

Extract from Table 5 (p.42)<sup>5</sup>

Tackling inequalities and promoting inclusion	
Closing the gap in attainment between groups of learners	Indicative
Provide assistance to overcoming the challenges faced by some learners	Promising

It is more accurate to state that for **some learners** the strength of evidence that digital technologies raise attainment is not just ‘promising’ or ‘indicative’ but overwhelming: technology is essential for them to even participate. Screen readers, computerised text-to-speech, high quality native language accents, adapted digital versions of curriculum texts, adapted digital exam papers, speech recognition, word prediction, dynamic screen based electronic communication aids with specialised vocabularies – each individually and collectively – have an evidence base to show that they don’t just raise attainment. Without their availability ‘some learners’ cannot independently or actively participate in the curriculum and have very little opportunity to raise attainment.

The literature review has presented an inadequate account of the range and complexity of contributions offered by digital technologies. If one doesn’t look for the evidence in the right places it won’t be found.

In comparison with its potential contribution to the wider population of learners, the importance of digital learning technologies in raising the attainment of learners with additional support needs and disabilities is therefore clearer. Indeed we were surprised at the omission from the Literature Review of the comprehensive report on the longitudinal analysis of raising attainment in Ontario schools. Ontario’s high performing educational system (lessons from which continue to inspire Scottish education) places digital technologies as a central driver in improving attainment in schools<sup>6,7</sup>. There, Hargreaves has shown that assistive technology is used best when it is considered within a context of inclusive teaching and learning practice, incorporating Universal Design for Learning, differentiated instruction and assistive technologies.

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<sup>5</sup> Literature review on the impact of digital technology on learning and teaching. ICT Consulting Services Ltd report to Scottish Government, November 2015. Social Research series ISSN 2045 6964. ISBN 978-1-78544-819-5. Available from <http://www.gov.scot/socialresearch>

<sup>6</sup> Hargreaves A, Braun H (2013) Leading for All: A research report of the development, design, implementation and impact of Ontario’s “Essential for Some, Good for All” initiative: Executive Summary

<sup>7</sup> Hargreaves, A (2013) How to Change Scottish Education based on the best practices of high performing systems around the world. Keynote presentation to Scottish Learning Festival 25 September 2013.

### Question 5

Do you agree with the priorities for action outlined in the ‘curriculum and assessment’ theme? (Pages 18-19)

Yes ☐ No ☒

Are there other actions that should be considered?

Yes. Scotland has an enviable record with respect to assessment and ASN. SQA’s policy and provision on the use of Assessment Arrangements in high stakes examinations is well regarded. In terms of digital technology, SQA was the first awarding body in the UK to offer Digital Question Papers, and Scotland is the only nation in the UK to provide free high quality computer voices for learners with reading or visual difficulties to use to access digital examinations.

However, not all SQA assessment instruments meet satisfactory standards for accessibility, and so we propose a modification to action 2:

- Work with SQA and other key partners to support, develop and embed **accessible** approaches to assessment that make full use of digital technology.

This is particularly important in the context of the proposed National Standardised Assessments. Given that the proposed assessments are intended to be universal, that approximately 20% of the school population are identified as having additional support needs, and that 11% of candidates sitting SQA examinations in 2015 required Assessment Arrangements meet their support needs, it is essential that these assessments are accessible for learners with additional support needs and disabilities.

### Question 6

Do you agree with the priorities for action outlined in the ‘teachers’ theme? (Pages 20-21)

Yes ☐ No ☒

Are there other actions that should be considered?

We propose re-wording bullet point 1 to:

- Open a dialogue with Initial Teacher Education (ITE) providers to agree an approach for embedding digital learning and teaching in ITE, in line with the GTCS Standards for Registration **and in line with other priorities for action identified in this consultation.**

The clause is important because GTCS Standards for Registration are somewhat weak in the area of teachers’ understanding of accessibility for all learners including those with

additional support needs and/or disabilities. In Graham Donaldson's state-of-the-art report<sup>8</sup> HMIE identified how well newly qualified teachers (NQTs) felt they were prepared to enter the world of teaching. The three areas in which they felt weakest were:

- Additional support needs
- ICT
- Child protection and safeguarding

The first two are not well covered in GTCS Standards for Registration at ITE or Basic level, nor at specialised levels. We do not address the third in our response. In order effectively to address the first two areas a clear mandate must be given to ITE providers to ensure that expectations of teachers in ITE and when engaged in further professional learning include awareness of, and how to address their obligations within the statutory guidance, identified in our response to Question 1 and elsewhere in this response.

### Question 7

Would you be willing to share your experiences of digital learning and teaching with us?

Yes ☒ No ☐

If so, please provide the details you would like us to use to contact you (e.g. an email address) in the box below.

Paul.Nisbet@ed.ac.uk or Stuart.Aitken@ed.ac.uk

### Question 8

Is there anything else you wish to add about the strategy?

Thank you for the opportunity to participate in the development of this important strategy.

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<sup>8</sup> Donaldson G (2010) Teaching Scotland's Future - Report of a review of teacher education in Scotland. ISBN 978 0 7559 9733 6. Available from <http://www.gov.scot/Publications/2011/01/13092132/0>