CALL Scotland

SQA Digital Question Papers

2013 - 14 Summary Report

THE UNIVERSITY *of* EDINBURGH

SQA Digital Question Papers

2014 Summary Report

May 2016

This report provides an overview of the development and use of SQA Digital Question Papers (DQPs) in the 2014 examination diet.

CALL has collated and published data on DQPs since they were first introduced in 2008 and the last full report covered the 2013 diet.

To maintain continuity and provide longitudinal data, we have produced summary reports for subsequent years beginning from 2014.

This work was funded primarily by the Scottish Qualifications Authority.

CALL Scotland is part-funded by the Scottish Government Learning Directorate.

Contents

2014 Assessment Arrangements

In 2014 there were 43,344 requests for Assessment Arrangements on behalf of 14,214 candidates, representing 10.7% of the total number of entries and 6.4% of the total number of candidates. This represents a reduction in the total number of requests for Assessment Arrangements (AA), which fell by almost a third (Table 1) between 2013 and 2014, from 61,680 to 43,344. The decrease is likely to be the result of several factors. Firstly, the total number of examination entries fell by 8.9% as a consequence of the phasing out of Standard Grade examinations. However, this would only account for around a third of the 29.7% reduction in the number of requests for assessment arrangements, and so clearly other factors are involved. We hypothesise that the main other factor driving the decrease in AA requests is because Assessment Arrangements are more commonly used by candidates sitting lower level qualifications (i.e. Standard Grade Foundation and General) which were phased out between 2013 and 2014.

Table 1: Number of candidates and requests for AA, 2008 – 2014

Year	Number of Candidates requesting AA	% of candidates requesting AA	Number of AA requests / entries	% of entries with AA
2008	12,284	7.2%	44,356	5.9%
2009	13,041	8%	45,612	6.2%
2010	13,962	8%	48,416	6.5%
2011	15,412	9.75%	53,705	7.32%
2012	16,537	10.30%	57,821	7.90%
2013	17,263	11.32%	61,680	8.32%
2014	14,214	10.70%	43,344	6.42%

Table 2: SQA candidates, exam entries and requests for Assessment Arrangements

	2008	2009	2010	2011	2012	2013	2014	% change 2013-14
Total number of SQA candidates	-	159,755	158,908	158,032	160,462	152,428	**132,588**	-13.0%
Total number of SQA entries	742,000	734,043	740,096	733,696	732,235	741,160	**675,361**	-8.9%
Number of AA requests	44,356	45,612	48,416	53,703	57,821	61,680	**43,344**	-29.7%

Most requests for permission to use AA specify more than one type of support and so the 43,344 requests in 2014 comprise 98,293 specific types of support (Table 3).

Types of Assessment Arrangements

Table 1 shows the number of requests for the most popular methods of support for the years 2008 to 2014 (excluding Extra Time, Separate Accommodation and Rest Period on the grounds that these are changes to the conditions rather than methods of support).

Up until this year, readers and scribes were by far the most common methods of support used in examaintions. But in 2014, the number of requests for readers or scribes have fallen by over half compared to the previous (Table 3; **Error! Reference source not found.**). The table gives the ercentage change between 2013 and 2014 for each type of support, and these can be compared against the overall 29.7% decrease in the total number of requests. Any arrangements that fell by a smaller percentage (i.e. which fell less than the 'average') are identified in the table with **bold** text.

Even when set against the 29.7% reduction in total requests, a 50% reduction in use of readers and scribes is striking. For the first time, there were more requests to use technology (either a word processor to type answers, and/or a Digital Question Paper than to use a reader or a scribe. Since Digital Papers were first introduced in 2008, use of readers and scribes has halved, while requests for Digital Papers have increased by 589%, and use of other types of ICT by 60%.

We see this as a positive trend in that more candidates are working independently by using technology, and fewer are relying on staff to support them in the assessment.

The number of requests for a prompter or practical helper also fell by a significant percentage (46%), while use of sign language in exams also reduced, albeit from very small numbers.

It is possible that these changes in type of support are related to the phasing out of the lower level Standard Grade Foundation and General papers, where usage of readers, scribes, prompters and BSL were more common, but we do not have data to support this hypothesis.
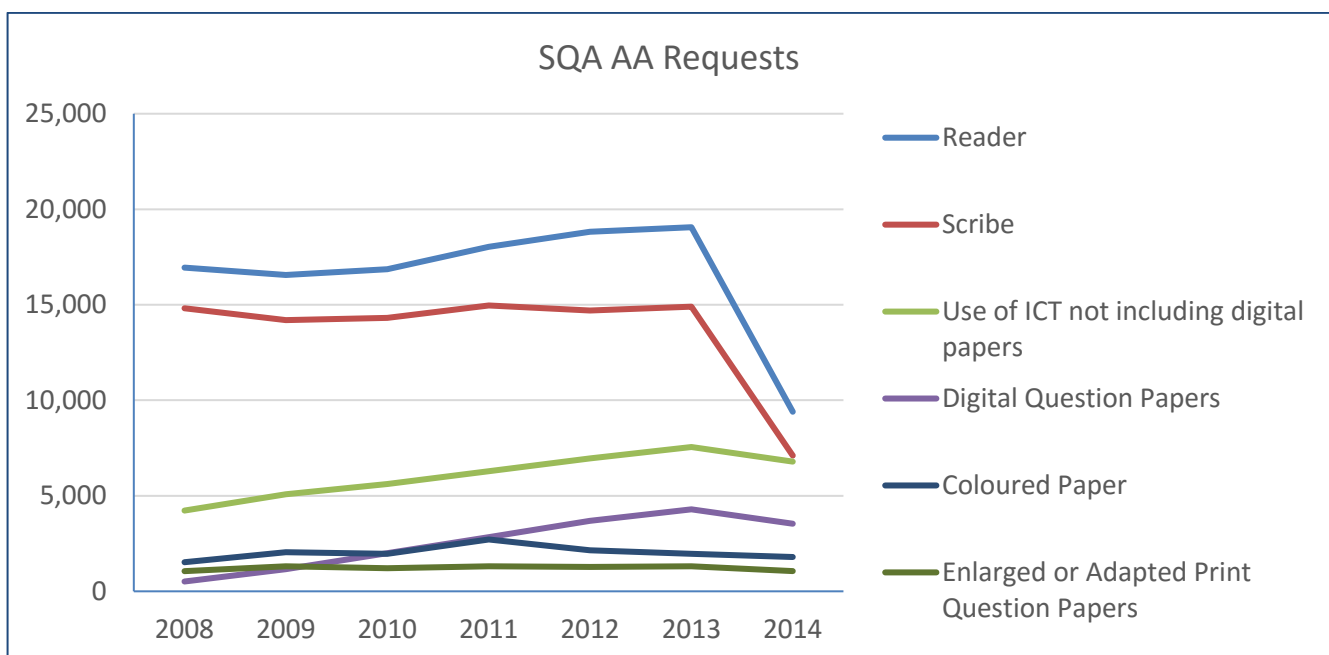

Figure 1: Number of requests for most popular methods of support, 2008-2014

Table 3: Number and type of Assessment Arrangements requested 2008-2014

Assessment Arrangement	2008	2009	2010	2011	2012	2013	2014	% Δ 2013 - 2014	Δ 2008 - 2014	% Δ 2008 - 2014
Extra Time	34,530	35,636	36,962	40,800	44,997	47,058	34,494	**-26.7%**	-36	0%
Separate Accommodation	25,793	26,381	28,689	31,950	34,744	37,584	24,277	-35.4%	-1,516	-6%
Use of ICT inc Digital Question Papers	4,741	6,253	7,622	9,135	10,656	11,844	10,326	**-12.8%**	5,585	118%
Reader	16,936	16,554	16,863	18,032	18,814	19,058	9,399	-50.7%	-7,537	-45%
Scribe	14,811	14,197	14,313	14,962	14,691	14,905	7,105	-52.3%	-7,706	-52%
Digital Question Papers	514	1,167	2,000	2,841	3,694	4,291	3,540	**-17.5%**	3,026	589%
Rest Period	1,517	1,434	1,636	1,664	2,036	2,410	2,232	**-7.4%**	715	47%
Prompter / Practical Helper	1,879	2,099	2,404	2,622	2,798	3,351	1,793	-46.5%	-86	-5%
Coloured Paper	1,523	2,050	1,964	2,713	2,144	1,968	1,793	**-8.9%**	270	18%
Enlarged or Adapted Print Question Papers	1056	1,305	1,209	1,305	1,280	1,310	1,064	**-18.8%**	8	1%
Transcription with correction	1,215	1,179	1,110	1,255	1,402	1,327	863	-35.0%	-352	-29%
Transcription without correction	751	626	590	721	736	534	421	**-21.2%**	-330	-44%
Calculator	556	660	684	653	604	639	341	-46.6%	-215	-39%
Modified Content (e.g. text description of images)	202	277	267	316	307	233	308	32.2%	106	52%
Referral of script to the Principal Assessor	781	540	465	398	361	271	192	-29.2%	-589	-75%
Adapted Certificate (e.g. in Large Print / Braille)	181	119	139	91	118	100	68	-32.0%	-113	-62%
Question Paper signed to candidate	43	57	52	43	87	66	32	-51.5%	-11	-26%
Taped transcription-Live Presentation	30	37	36	40	35	36	26	**-27.8%**	-4	-13%
Braille	57	31	59	35	40	23	18	**-21.7%**	-39	-68%
Candidate Signs Responses	40	42	38	23	51	37	11	-70.3%	-29	-73%
Totals	**107,156**	**110,644**	**117,102**	**129,599**	**139,595**	**147,045**	**98,303**	**-33.1%**	**-8,853**	**-8%**

Recording requests for text-to-speech with the AAR system

Following passage of the Equality Act[1], SQA's policy on making reasonable adjustments was revised and one of the decisions was to restrict the use of readers and scribes in assessment of literacy for the new National English 3 and 4 Qualifications. The policy does however permit use of text-to-speech for the assessment of reading. Therefore, it is important to research and monitor the use of text-to-speech in assessments and examinations. Data on the use of computer readers in National 3 or 4 Literacy assessments is not collected centrally, because these are internal assessments. It would be very helpful, therefore, if centres were able to make requests to use text-to-speech through the SQA AAR system[2]. Recording requests to use text-to-speech would also enable direct comparisons to be made between human and computer readers. Unfortunately, this has yet to be implemented.

Digital Question Papers

The number of requests for DQPs fell by 18% from 2013 to 2014, and the number of candidates by 11%. However, given that there was a reduction of 29% in the number of requests for assessment arrangements, requests for DQPs have increased compared to the average (Figure 2).

There was a small increase in the number of centres requesting DQPs (Table 4).

Table 4: Digital Question Papers 2008 - 2014

	2008	2009	2010	2011	2012	2013	2014	% Δ 2013 - 2014
Number of requests	514	1,167	2,000	2,832	3,694	4,291	**3,540**	-18%
Number of centres making requests	46	73	101	149	173	188	**191**	2%
Number of candidates	204	422	675	1,069	1,327	1,677	**1,487**	-11%
Mean number of requests per centre	11.17	15.99	19.80	19.01	21.35	22.82	**18.53**	-19%
Mean number of candidates per centre	4.43	5.78	6.68	7.32	7.67	8.92	**7.79**	-13%
Mean number of requests per candidate	2.52	2.77	2.96	2.65	2.78	2.56	**2.38**	-7%

---

[1] SQA Equality Act Consultation http://www.sqa.org.uk/sqa/48643.html
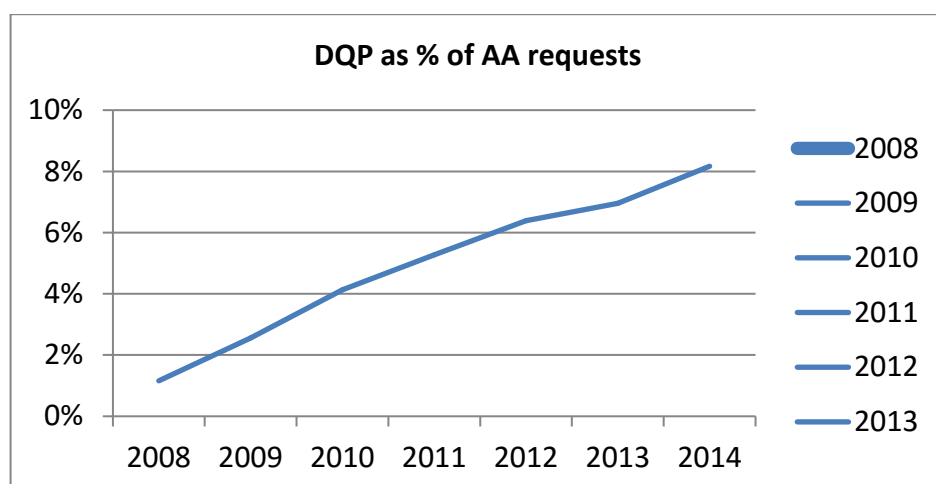
[2] SQA AAR https://aar.sqainfo.net

Figure 2: Requests for DQPs as % of total AA requests

DQP uptake: 'top 15' centres

The 'top 15' centres to request Digital Question Papers are given in Table 5. Harris Academy in Dundee continue to make the largest number of requests. The variability against the average reduction of 18% is interesting (from +229% to -43%) but is perhaps to be expected given the change from Standard Grade to National 5 examinations.

Table 5: Number of requests from top 15 centres

Centre	2014	2013	2012	2011	% change 2013 to 2014
Harris Academy	201	216	201	125	-7%
Prestwick Academy	151	111	110	84	36%
Robert Gordon's College	80	127	103	93	-37%
Largs Academy	79	60	38	36	32%
Beath High School	78	138	151	87	-43%
St Paul's RC Academy	76	103	175	161	-26%
Musselburgh Grammar School	74	48	22	43	54%
Williamwood High School	74	38	40	0	95%
Albyn School	73	58	44	18	26%
Montrose Academy	69	44	77	77	57%
Oldmachar Academy	60	70	53	18	-14%
Stranraer Academy	57	59	62	67	-3%
Dunfermline High School	57	0	0	0	-
Millburn Academy	57	93	10	0	-39%
Banff Academy	56	17	0	0	229%

DQP uptake: local authorities / sector

Table 6 records the number of requests from each local authority or sector. As we would expect, there were fewer requests from centres in many authorities, but a few authorities actually saw an increase (identified in **bold**).

(The 'half' requests are because the data from SQA does not give the number of requests where the school has requested less than 5, so for these schools it could be between 1 and 5. We therefore use the median of 2.5.)

Table 6: Requests by local authority / sector 2012 - 14

Authority/sector	2014	2013	2012	Authority/sector	2014	2013	2012
Dundee City	301.5	362	424	Clackmannanshire	79	94	68
South Ayrshire	275	218	177	West Lothian	73.5	134	117
Aberdeenshire	260.5	322	251	Midlothian	73	87	52
Independent	242.5	250	247	FE College	**62**	33	35
Perth and Kinross	229.5	402	314	Renfrewshire	40.5	66	30
Fife	218.5	264	234	Moray	**40**	27	35
Highland	190.5	236	90	Scottish Borders	37	46	16
North Ayrshire	**170**	127	88	South Lanarkshire	36.5	67	52
Angus	**154.5**	125	122	Argyll and Bute	36	116	98
Edinburgh City	143.5	232	268	Falkirk	32	109	130
East Lothian	**143**	93	63	West Dunbartonshire	**30**	25	8
City of Glasgow	126	171	161	Orkney	**22**	8	0
East Renfrewshire	**113**	86	75	Eilean Siar (Western Isles)	**22**	3	1
Dumfries and Galloway	109	156	145	Inverclyde	19	28	38
North Lanarkshire	88	105	92	Stirling	10	15	62
Aberdeen City	83	129	99	Shetland Islands	5	8	11
East Ayrshire	83	120	84	East Dunbartonshire	0	8	7
				Not known		21	

Table 7 gives the percentage of schools and centres in each local authority or sector requesting Digital Question Papers over the last three years. Usage across Scotland is increasing, but uptake in many local authorities remains low and so there is considerable scope for schools and centres, SQA, local authorities, CALL Scotland, and other agencies to do more to promote the use of technology in examinations, and build capacity in schools.

Table 7: Percentage of schools and centres requesting Digital papers, 2012-14

Authority / sector	2014	2013	2012	Authority / sector	2014	2013	2012
Perth and Kinross	100%	100%	80%	Fife	40%	24%	32%
East Lothian	100%	67%	67%	Argyll and Bute	40%	30%	50%
South Ayrshire	88%	63%	50%	West Lothian	38%	38%	31%
Angus	75%	50%	63%	Stirling	38%	38%	38%
East Ayrshire	67%	44%	44%	Aberdeen City	31%	54%	31%
Aberdeenshire	65%	76%	59%	Scottish Borders	30%	40%	30%
Orkney Islands	60%	20%	0%	Eilean Siar (Western Isles)	25%	25%	25%
FE College	57%	14%	15%	Moray	22%	33%	22%
Midlothian	57%	57%	43%	Shetland Islands	22%	11%	22%
North Ayrshire	55%	45%	45%	Independent	21%	13%	16%
Dumfries and Galloway	53%	59%	41%	Edinburgh City	21%	28%	34%
Renfrewshire	50%	42%	33%	North Lanarkshire	21%	21%	24%
Clackmannanshire	50%	50%	50%	City of Glasgow	21%	31%	28%
Highland	48%	39%	39%	West Dunbartonshire	20%	20%	20%
Dundee City	45%	55%	45%	South Lanarkshire	18%	27%	36%
Falkirk	44%	67%	56%	Inverclyde	11%	22%	33%
East Renfrewshire	43%	43%	43%	East Dunbartonshire	0%	22%	22%

Engagement and CPD

Table 8 lists conference and training events between 1 April 2013 to 31 March 2014 where CALL staff delivered CPD or presented on the digital question papers. In-service training is primarily funded by schools and local authorities while presentations and conferences are supported through CALL core funding from the Scottish Government. This direct engagement with staff and parents helps raise awareness and builds capacity in schools and centres, and will have led at least in part to the increase in use of DQP across Scotland. Several events were run to raise awareness and capacity about the use of technology to assess Literacy for National Qualifications.

Table 8: Engagement and CPD events 2013-14

Date	Topic / title	Event & Venue	Number of participants
17/4/13	SQA Digital Question Papers	The Edinburgh Academy	7
19/4/13	SQA Digital Question Papers	South Lanarkshire College	5
24/5/13	SQA Digital Question Papers	Dundee	14
21/6/13	SQA Digital Question Papers	South Lanarkshire College	12
2/9/13	SQA Digital Question Papers	Aberdeen	24
5/9/13	SQA Digital Question Papers	Webinar	12
12/9/13	SQA Digital Question Papers	CALL Scotland, Edinburgh	19
3/10/13	SQA Digital Question Papers	CALL Scotland, Edinburgh	11
20/11/13	ICT in Assessment of Literacy at National 3 and 4	Webinar	18
25/11/13	SQA Digital Question Papers	West Dunbartonshire	12
29/11/13	SQA Digital Question Papers	CALL Scotland, Edinburgh	19
30/1/14	SQA Digital Question Papers	CALL Scotland, Edinburgh	21
11/2/14	Supportive ICT Practices for National Literacy Units	Stirling Council	30
15/1/14	Supportive ICT Practices for National Literacy Units	CALL Scotland	70
6/3/14	Supportive ICT Practices for National Literacy Units	Education Scotland National Literacy Network, Stirling	100
18/3/14	Supportive ICT Practices for National Literacy Units	Glasgow Council	50
19/3/14	Supportive ICT Practices for National Literacy Units	Autism Education Network	20
28/3/14	Text to Speech in Exams: Pitfalls and Practical Solutions	British Dyslexia Association International Conference Guildford	50
		TOTAL NUMBER OF PARTICPANTS	**494**

Focus Group 2014

A Focus Group was held on 29/10/14 for staff in centres that had used digital papers in the 2014 examination diet. The morning provided an opportunity to discuss the findings of a survey conducted by SQA in June 2014, and to obtain feedback from practitioners.

Practitioners were in general positive about the use of technology in examinations (some comments are given in Figure 3.

The most common suggestions for improvement were to:

- increase the number of papers in question-and-answer format, where answers can be typed in directly to the paper;
- improve pronunciation accuracy in Geography papers;
- improve facilities for generating maths and science expressions in digital papers.

The Nat 5 samples on the digital site were very useful to us. Used by those who sat Nat 4 assessments digitally in S3 and who were sitting Nat 5 in S4. We plan to have the majority of learners who are entitled to a reader use the text-to-speech as standard so I am working with all on our AAA list to ensure they have digital exams as an option. Also use them with young people with ASD and ADHD.

We are encouraging more and more pupils to use their own tablet devices in classes and converting more classroom learning resources to PDF forms so that pupils - particularly those with literacy or dysgraphic problems - can use the technology to support their learning. Being able to use the devices at home and at school is advantageous.

Our school is moving towards having more pupils using DQP's than using readers and scribes.

A few candidates with confirmed Dyslexia still need the support of a human reader but the vast majority of candidates across a range of subjects will be presented (with accompanying evidence) for Digital Question Papers adjustment. I think it is a super step forward for youngsters to have access to ICT as this mirrors arrangements that they may need to use in the work place and in higher or further education if they have genuine specific difficulties.

Figure 3: Sample of comments from 2014 survey

Developments identified for 2015 were:

- 'tag' DQPs which should improve reading and reflow;
- add bookmarks to aid navigation;
- produce more subject-specific Digital Answer Booklets for National 5 papers;
- produce new guidance for maths and science papers;
- continued work on DQPs for blind candidates using screen readers;
- information days on speech recognition;

CALL Scotland

CALL Scotland

Moray House School of Education

The University of Edinburgh

Paterson's Land

Holyrood Road

Edinburgh EH8 8AQ

http://www.callscotland.org.uk

THE UNIVERSITY *of* EDINBURGH