SQA Digital Question Papers

2013 Summary Report

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THE UNIVERSITY *of* EDINBURGH

SQA Digital Question Papers

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Contents

Summary

This report provides an overview of the development and use of SQA Digital Question Papers (DQPs) in 2013-14.

The report collates information from several sources:

- SQA data on requests for assessment arrangements and for Digital Question Papers;
- questions and feedback from practitioners who have contacted CALL Scotland or SQA with specific questions or comments throughout the session;
- feedback obtained via an SQA online survey in June 2013 following the exam diet;
- feedback from practitioners attending a Focus Group day on 30 October 2013.

The key points are:

- The number of candidates using Assessment Arrangements, and the percentage of the total number of candidates has continued to increase. In 2013, 17,263 candidates (11.3% of the total) requested Assessment Arrangements for 61,680 examination entries (8.3% of the total number). This represents a 6.6% increase in the number of requests from 2012 and a 39% increase over 6 years since 2008.
- Requests for use of ICT (including Digital Question Papers) increased by 11.1% compared with 2012, from 10,656 to 11,844. There has been a 150% increase in use of ICT since 2008.
- Requests for Digital Question Papers increased by 16.2% compared to 2012, from 3,694 to 4,291. This is a 735% increase since the papers were first offered in 2008.
- It is clear that schools and learners are increasingly adopting ICT and Digital Question Papers and more than half the schools in Scotland now use the papers.
- Feedback from staff indicates that technology offers a more independent method of support; that the technology in the majority of cases is reliable; and that support in examinations using technology is more efficient in terms of staffing and accommodation than human readers and scribes.
- SQA continues to work with CALL Scotland and presenting centres to improve design and delivery of Digital Question Papers and Digital Answer Booklets, although there are some limitations of what can be achieved using the technology that is currently available.
- Usage varies across the country: while all the schools in one authority used DQPs last year, DQPs are used in less than half the schools in 20 of the 32 local authorities in Scotland. There is still a need for advice, support and CPD to support staff to implement the use of technology in examinations.
- The introduction of mandatory National Literacy Qualifications in 2013-14, for which human reader/scribes are not acceptable arrangements to assess reading or writing, is likely to further impact on the uptake of DQPs in future. Both current technology as well as increased availability of tools such as text-to-speech software will drive the adoption of digital assessments.

2013 Assessment Arrangements

In 2013 there were 61,680 requests for Assessment Arrangements on behalf of 17,263 candidates, representing 11.3% of the total number of entries and 8.3% of the total number of candidates. The number and percentage of candidates using AA continues to increase, together with the number and percentage of examination entries for which AA are requested (Table 1).

Table 1: Number of candidates and requests for AA, 2008 – 2013

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%

Most requests for permission to use AA specify more than one type of support and so the 61,680 requests in 2013 comprise 147,045 specific types of support (Table 2). The most common types of support requested are Extra Time and Separate Accommodation followed by a human reader or scribe and then ICT (including digital papers).

Trends 2012 to 2013

The total number of requests increased by 3,859, from 57,821 to 61,680, between 2012 and 2013. If we omit arrangements that are to do with the conditions (Extra Time, Separate Accommodation and Rest Period), the type of arrangements that increased most were ICT or Digital Papers (1,188) followed by a Prompter/Practical Helper (553). The largest reductions in numbers of requests were for Transcription without Correction (down by 202) and for the question paper printed on coloured paper (down by 176).

Table 2 gives the percentage change between 2012 and 2013 for each type of support. There was a 5.3% increase in the total number of requests from 2012 to 2013. Any arrangements that rose by a greater percentage (i.e. which are more prevalent than 'average') are identified in the table with bold text.

The arrangements that saw the greatest percentage increases in 2012-13 were: Prompter/Practical Helper; Rest Period; Digital Question Papers and use of ICT. The support methods that showed the largest percentage reduction in number of requests were: use of sign language; Transcription without Correction; referral of the script to the Principal Assessor and Modified Content.

Trends 2008 to 2013

Over the last six years, the total number of requests has increased by 39,889, from 107,156 to 147,045: a 37% increase. Table 2 gives the numerical and percentage changes in the number of requests from 2008 to 2013 and again, methods that have become more common than this average are indicated in bold.

Table 2: Number and type of Assessment Arrangements requested 2008-2013

Assessment Arrangement	2008	2009	2010	2011	2012	2013	% Δ 2012 - 2013	Δ 2008 - 2013	% Δ 2008 - 2013
Extra Time	34,530	35,636	36,962	40,800	44,997	47,058	4.6%	12,528	36%
Separate Accommodation	25,793	26,381	28,689	31,950	34,744	37,584	**8.2%**	11,791	**46%**
Reader	16,936	16,554	16,863	18,032	18,814	19,058	1.3%	2,122	13%
Scribe	14,811	14,197	14,313	14,962	14,691	14,905	1.5%	94	1%
Use of ICT (including digital papers)	4,741	6,253	7,622	9,135	10,656	11,844	**11.1%**	7,103	**150%**
Digital Question Papers	514	1,167	2,000	2,832	3,694	4,291	**16.2%**	3,777	**735%**
Prompter / Practical Helper	1,879	2,099	2,404	2,622	2,798	3,351	**19.8%**	1,472	**78%**
Rest Period	1,517	1,434	1,636	1,664	2,036	2,410	**18.4%**	893	**59%**
Coloured Paper	1,523	2,050	1,964	2,713	2,144	1,968	-8.2%	445	29%
Transcription with correction	1,215	1,179	1,110	1,255	1,402	1,327	-5.3%	112	9%
Enlarged or Adapted Print Question Papers	1056	1,305	1,209	1,305	1,280	1,310	2.3%	254	24%
Calculator	556	660	684	653	604	639	**5.8%**	83	15%
Transcription without correction	751	626	590	721	736	534	-27.4%	-217	-29%
Referral of script to the Principal Assessor	781	540	465	398	361	271	-24.9%	-510	-65%
Modified Content (e.g. text description of images)	202	277	267	316	307	233	-24.1%	31	15%
Adapted Certificate (e.g. in Large Print / Braille)	181	119	139	91	118	100	-15.3%	-81	-45%
Question Paper signed to candidate	43	57	52	43	87	66	-24.1%	23	**53%**
Candidate Signs Responses	40	42	38	23	51	37	-27.5%	-3	-8%
Taped transcription - Live Presentation	30	37	36	40	35	36	2.9%	6	20%
Braille	57	31	59	35	40	23	-42.5%	-34	-60%
TOTALS	**107,156**	**110,644**	**117,102**	**129,599**	**139,595**	**147,045**	**5.3%**	**39,889**	**37%**

Figure 1 shows the number of requests for the most popular methods of support for the years 2008 to 2013 (excluding Extra Time, Separate Accommodation and Rest Period on the grounds that these are changes to the conditions rather than methods of support). Readers and scribes are by far the most common methods of support, while use of ICT (including Digital Question Papers) has shown the largest increase (a rise of 7,103 requests compared to 2,122 for readers).
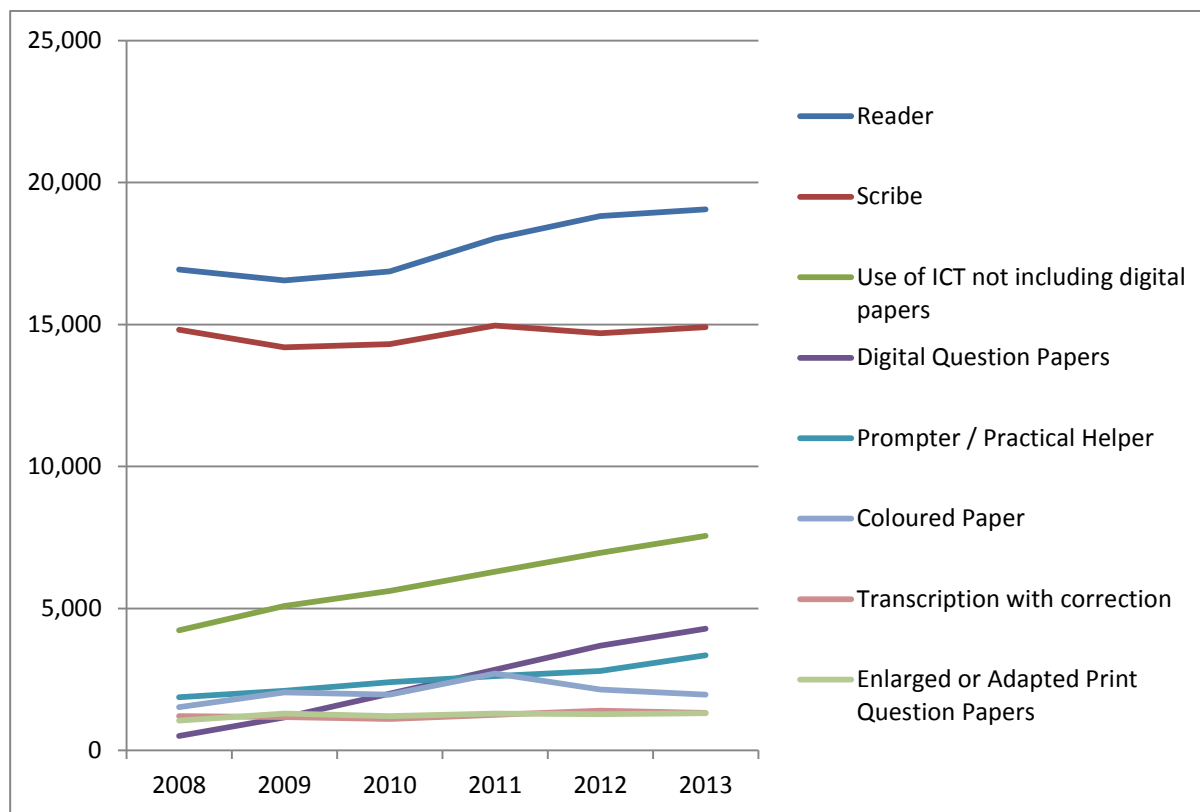

Figure 1: Number of requests for most popular methods of support, 2008-2013

Readers and scribes compared to ICT and digital papers

The pilot studies and previous feedback from staff and pupils suggests that some candidates choose ICT and digital papers instead of readers and/or scribes because they feel greater independence and confidence. Staff reported that technology requires fewer staff and accommodation resources than reader/scribes. We are therefore interested in tracking the uptake of ICT compared to human support.

Requests for a reader rose by 2,122 between 2008 and 2013 (13%) which is a lower rate of increase than the average and of the other methods that support candidates with reading impairments, such as use of digital, coloured and enlarged papers. Note that the number of requests for a Prompter or Practical Helper has increased considerably over the period (by 1,472): this category was first introduced in 2007 and prior to that, a helper would have been counted as a reader or scribe, and so this increase may actually represent a re-categorisation of readers/scribes as prompters/practical helpers by schools rather than an actual increase.

The proportion of the overall number of requests that includes a reader has dropped from 38% to 30.9% (Table 3 and Figure 2) while the proportion of requests that include digital papers in particular have increased. While we know that some candidates are using digital papers with text-to-speech instead of a reader, we cannot quantify the number as the data is not available. However, candidates who use text-to-speech to read digital papers would very likely have used human readers, were the digital option not available, and so it is

probable that the number of requests for readers would have increased by even more than 13%, had SQA not introduced digital papers.

Comparing scribes to ICT as methods of support for writing and recording appears slightly more clear-cut. The percentage of requests that included a scribe dropped from 33.4% to 24.2%, while other methods of supporting writers, particularly ICT and digital papers, increased. This does not prove that ICT is replacing scribes because approximately the same numbers of pupils are still using scribes, but given the overall increase in the number of candidates and requests, it is likely that many of these candidates would have used scribes had ICT not been an option.

Table 3: Percentages of requests for most popular methods of support, 2008-2013

|	2008	2009	2010	2011	2012	2013
Total number of requests	44,356	45,612	48,416	53,705	57,821	61,680
Reader	38.2%	36.3%	34.8%	33.6%	32.5%	30.9%
Scribe	33.4%	31.1%	29.6%	27.9%	25.4%	24.2%
Use of ICT not including digital papers	9.5%	11.2%	11.6%	11.7%	12.0%	12.2%
Digital Question Papers	1.2%	2.6%	4.1%	5.3%	6.4%	7.0%
Prompter / Practical Helper	4.2%	4.6%	5.0%	4.9%	4.8%	5.4%
Coloured Paper	3.4%	4.5%	4.1%	5.1%	3.7%	3.2%
Transcription with correction	2.7%	2.6%	2.3%	2.3%	2.4%	2.2%
Enlarged or Adapted Print Question Papers	2.4%	2.9%	2.5%	2.4%	2.2%	2.1%
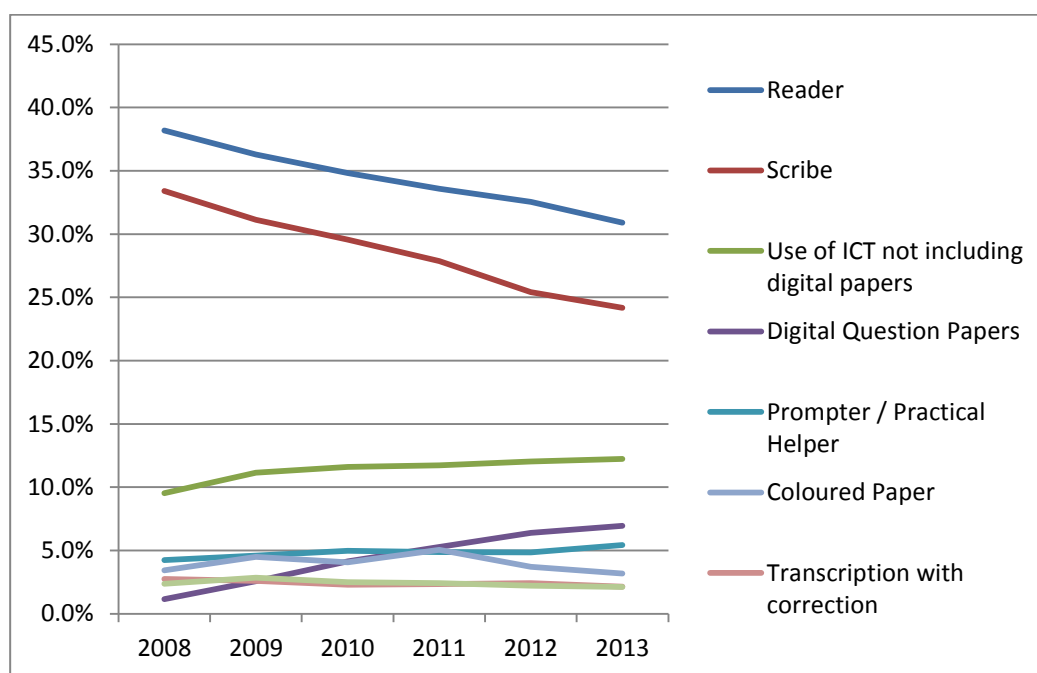
Figure 2; Percentages of requests that include the most popular methods of support, 2008-2013

Recording use of text-to-speech with the AAR system

Following passage of the Equality Act[1], SQA's policy on making reasonable adjustments was revised with the effect of restricting the use of readers and scribes in assessment of literacy for the new National English 3 and 4 Qualifications. The policy does permit use of text-to-speech, and as a result of these changes it was important to research the use of text-to-speech in examinations. However, as we discussed above, because it is not actually possible to state how many candidates use this technology, we recommend that requests for use of TTS should be recorded by SQA through the AAR system[2].

The effect would be that, when making a request for a Digital Question Paper or for use of ICT, staff should also have the option of requesting 'with Text-to-Speech'. Such an option is already in use when requesting a spellchecker and so it should be relatively simple to add the option.

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[1] SQA Equality Act Consultation http://www.sqa.org.uk/sqa/48643.html

[2] SQA AAR https://aar.sqainfo.net

Digital Question Papers

The number of centres, candidates and requests for Digital Question papers all increased in 2013, by 9%, 26% and 16% respectively. Both the mean number of candidates using DQPs in each centre, and the mean number of requests made have increased. The mean number of requests per candidate fell slightly: the rate of increase in number of candidates was higher than the rate of increase in number of requests. We know from previous years that candidates who are using papers for the first time tend to only request a small number of papers, and so this may be why the mean number of requests has fallen.

Table 4: Digital Question Papers 2008 - 2013

|	2008	2009	2010	2011	2012	2013	% Δ 2012 - 2013
Number of requests	514	1,167	2,000	2,832	3,694	4,291	16%
Number of centres making requests	46	73	101	149	173	188	9%
Number of candidates	204	422	675	1,069	1,327	1,677	26%
Mean number of requests per centre	11.17	15.99	19.80	19.01	21.35	22.82	7%
Mean number of candidates per centre	4.43	5.78	6.68	7.32	7.67	8.92	16%
Mean number of requests per candidate	2.52	2.77	2.96	2.65	2.78	2.56	-8%
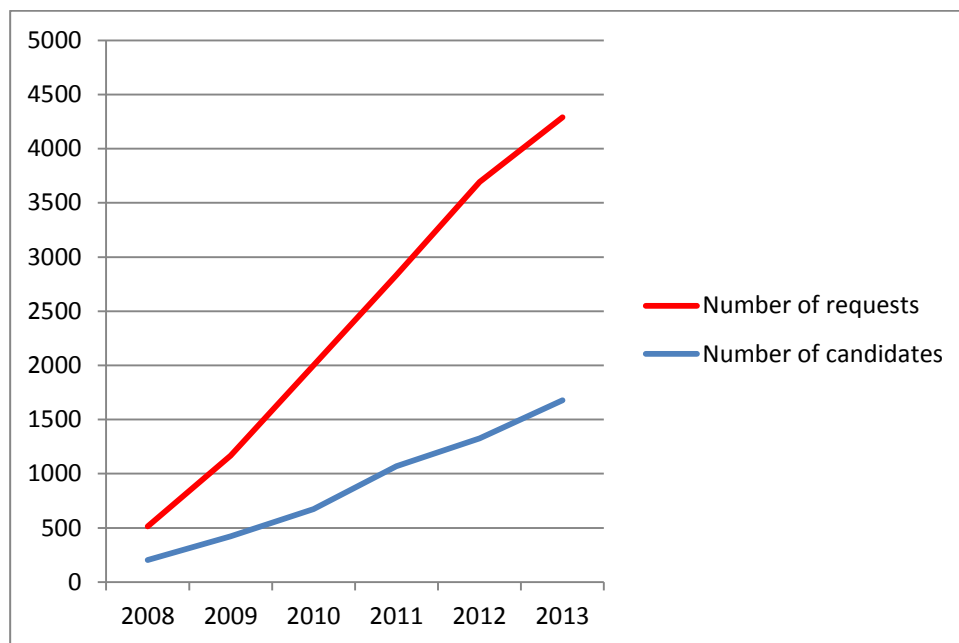
Figure 3: Number of candidates using DQPs and number of requests, 2008 – 2013

Table 5 and Figure 4 show the percentages of centres requesting different numbers of papers from 2008 to 2013. Over the six years of presentation, there has been a gradual shift with greater percentages of centres requesting a larger number of papers (e.g. in 2008, 39% of centres requested more than 10 papers; in 2013, this had risen to 53%), showing that centres tend to 'start small' and increase usage as they gain experience.

Table 5: Percentages of centres requesting different numbers of digital papers 2008 - 2013

Number of requests	2008	2009	2010	2011	2012	2013
1 only	10.9%	16.4%	12.9%	13.4%	12.1%	10.1%
2 to 5	43.5%	28.8%	33.7%	24.2%	24.9%	19.1%
6 to 10	6.5%	19.2%	13.9%	20.1%	17.3%	18.6%
11 to 20	23.9%	12.3%	13.9%	14.8%	11.0%	18.1%
21 to 50	13.0%	15.1%	15.8%	16.8%	26.0%	20.7%
51 to 100	2.2%	6.8%	5.9%	8.1%	4.6%	11.2%
more than 100	0.0%	1.4%	4.0%	2.7%	4.0%	2.7%
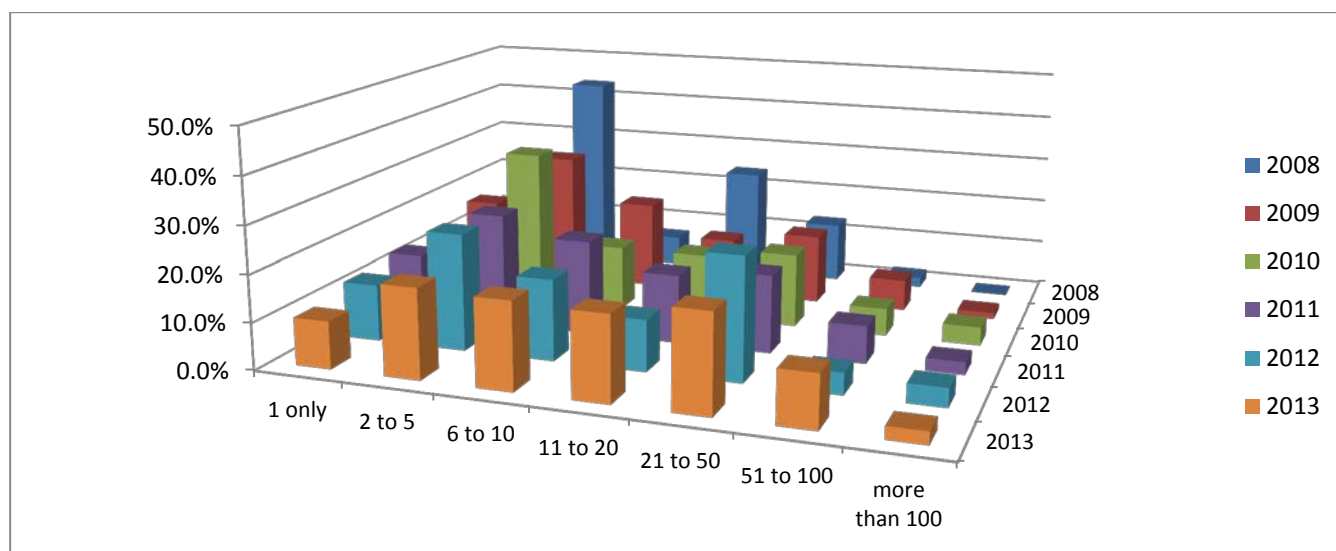
Figure 4: Percentages of centres requesting different numbers of digital papers 2008 - 2013

Table 6 gives the number of requests for Digital Question Papers from the 'top 30' centres for 2013 along with the number of requests from the same centres in the previous 6 years also. The top 30 (16% of all centres using DQPs) accounted for 54% of the total requests for digital question papers in 2013. This figure is gradually decreasing over time as the total number of centres increases.

Table 6 also gives the mean number of entries for which digital question papers were requested, for the top 30 centres in 2013, in previous years, and the mean for the top 30 in each of the previous years. (These are different because the top 30 centres vary from year to year.) The average number of requests for the top 30 centres has risen from 16 in 2008 to 78 in 2013, showing that DQPs have become a more popular method of support amongst these centres.

Table 6: 'Top 30' centres requesting digital papers 2008 - 2013

Centre	Number of requests 2008	Number of requests 2009	Number of requests 2010	Number of requests 2011	Number of requests 2012	Number of requests 2013
Harris Academy	0	20	46	125	201	216
Beath High School	0	5	15	87	151	138
Robert Gordon's College	0	0	0	93	103	127
Prestwick Academy	31	60	89	84	110	111
St Paul's RC Academy	0	32	114	161	175	103
Aboyne Academy and Deeside Community Centre	16	34	32	55	96	99
Blairgowrie High School	0	0	0	7	121	98
Millburn Academy	0	0	0	0	10	93
Campbeltown Grammar School	40	37	122	109	64	87
Holy Rood High School	15	30	41	53	61	75
The Royal High School	52	82	111	60	124	73
St Andrew's High School	0	0	0	9	50	71
Oldmachar Academy	0	0	0	18	53	70
Perth Academy	0	0	0	0	0	68
Alva Academy	3	0	1	23	27	67
West Calder High School	0	23	39	28	41	67
Denny High School	0	0	29	34	30	62
Largs Academy	0	2	16	36	38	60
Belmont Academy	0	0	0	7	21	59
Stranraer Academy	30	62	89	67	62	59
Albyn School	0	0	30	18	44	58
Kinross High School	32	59	100	65	62	58
Portlethen Academy	0	0	0	32	47	58
Mintlaw Academy	41	48	61	72	38	57
Auchmuty High School	0	0	0	0	33	54
Kinlochleven High School	0	0	0	0	17	52
Lochgelly High School	0	0	18	12	32	49
The Community School of Auchterarder (Secondary)	0	0	0	18	34	49
Musselburgh Grammar School	0	0	9	43	22	48
Penicuik High School	0	0	0	12	41	48
Totals	**275**	**520**	**986**	**1478**	**2165**	**2334**
Mean for 2013 top 30 Centres	**8.67**	**16.47**	**32.07**	**44.27**	**63.60**	**77.80**
Mean for top 30 centres for each year 2008-13	**16.10**	**33.63**	**53.37**	**62.90**	**72.17**	**77.80**
% of requests made by top 30 centres for that year	**94%**	**86%**	**80%**	**67%**	**59%**	**54%**

The mean number of requests may give an indication of future uptake:

- if every centre in Scotland made 22.82 requests (the mean across all centres that used digital papers in 2013), SQA would receive 11,866 requests for Digital Question Papers;

- if every centre in Scotland made 77.8 requests (the mean from the top 30 centres in 2013), SQA would receive 40,456 requests.

Requests from different sectors

Table 7 presents the number of requests from each sector (local authorities, FE Colleges and Independent schools) since the papers were first offered in 2008, rank ordered by the number of requests in 2013.

Table 7: Local authority requests 2008 – 2013

Authority	Number of requests 2008	Number of requests 2009	Number of requests 2010	Number of requests 2011	Number of requests 2012	Number of requests 2013	Change 2012 to 2013	% change 2012 to 2013
Perth and Kinross	32	59	100	111	314	402	88	28%
Dundee City	8	62	201	322	424	362	-62	-15%
Fife	12	149	306	190	234	264	30	13%
Independent	10	22	55	148	247	250	3	1%
Highland	20	22	65	83	90	236	146	162%
Edinburgh City	82	122	175	147	268	232	-36	-13%
Aberdeenshire	62	65	115	205	251	322	71	28%
South Ayrshire	35	60	108	121	177	218	41	23%
City of Glasgow	19	42	102	206	161	171	10	6%
Dumfries and Galloway	31	89	102	100	145	156	11	8%
West Lothian	0	45	59	133	117	134	17	15%
Aberdeen City	20	52	19	55	99	129	30	30%
North Ayrshire	4	16	30	68	88	127	39	44%
Angus	3	0	23	116	122	125	3	2%
East Ayrshire	0	1	8	96	84	120	36	43%
Argyll and Bute	40	38	122	115	98	116	18	18%
Falkirk	27	97	98	119	130	109	-21	-16%
North Lanarkshire	2	15	2	26	92	105	13	14%
Clackmannanshire	8	0	1	23	68	94	26	38%
East Lothian	0	0	13	92	63	93	30	48%
Midlothian	0	4	14	24	52	87	35	67%
East Renfrewshire	0	4	21	42	75	86	11	15%
South Lanarkshire	18	1	16	26	52	67	15	29%
Renfrewshire	8	13	12	13	30	66	36	120%
Scottish Borders	6	41	64	9	16	46	30	188%
FE College	5	21	28	39	35	33	-2	-6%
Inverclyde	13	33	20	75	38	28	-10	-26%
Moray	18	31	39	54	35	27	-8	-23%
West Dunbartonshire	0	0	0	0	8	25	17	213%
Not known						21	21	
Stirling	13	36	58	38	62	15	-47	-76%
East Dunbartonshire	0	7	4	8	7	8	1	14%
Orkney	0	0	0	0	0	8	8	
Shetland Islands	18	18	16	3	11	8	-3	-27%
Eilean Siar (Western Isles)	0	2	4	25	1	3	2	200%
TOTALS	**514**	**1167**	**2000**	**2832**	**3694**	**4293**	**+ 599**	**16%**

(The data from SQA does not provide the source of 21 requests, and the total in this data set (4293) is two more than the total provided from other SQA data.)

There were increases in the number of requests from most local authorities and sectors between 2012 and 2013; the largest from Highland and Perth & Kinross. For the first time, requests were received from every local authority in Scotland. The largest reductions in number of requests were from Dundee City (-62) and Stirling (-47).

In percentage terms, West Dunbartonshire, Western Isles, Scottish Borders and Highland had the largest proportional increases.

Table 8 provides an indication of uptake of digital question papers across Scotland by giving the percentage of centres in each local authority or sector that requested DQPs. In most sectors (24), the number of centres using DQPs remained static or increased; there was a reduction in 11 local authorities or sectors. (Note that the local authority or sector is not known for 21 of the centres and that the number of FE colleges has reduced with mergers and so these figures are not 100% accurate.)

For the first time, all the schools in one local authority (Perth and Kinross) used Digital Question Papers. However, despite the overall increase in the number of requests, centres and candidates, DQPs are used in less than half the schools in 20 of the 32 local authorities in Scotland.

Although local authorities and sectors vary greatly across Scotland in terms of size, number of centres, population, socio-economic and geographic factors, it is clear that the use of DQPs is uneven across the country. It is possible that many candidates are not being offered the same opportunities to work independently using technology as others.

Given the potential benefits of using ICT and digital question papers both for candidate independence and life skill development, as well as in terms of more efficient administration of examinations, it is essential to find out the reasons for take-up remaining uneven. In addition, the introduction of new national qualifications and the restriction on the use of human readers and human scribes in assessment of Literacy at National 3 and 4 are likely to increase demand for the use of ICT in assessments, because computer readers and technology can be used in these literacy assessments. This has certainly led to more requests for information and advice from schools, local authorities and technical support teams, regarding the installation of text-to-speech software and the Scottish computer voices, and so it will be interesting to analyse the requests for DQPs in 2014 and subsequent years as to whether this leads to an increase in the number of schools using DQPs. In light of the potential benefits offered by ICT and digital papers, an equally important question is whether increased uptake will be uniform across Scotland or remain confined to those schools and authorities that have already adopted this approach.

While technology and Digital Question Papers are beneficial for candidates with additional support needs in assessments and examinations, the greatest benefit of introducing assistive technology is the potential impact on teaching and learning. Learners who have difficulty reading or accessing examinations papers usually also have difficulty with curriculum materials in general; by providing these learners with appropriate technologies and support and with books and curriculum materials in digital format, their knowledge and understanding will improve (Anderson-Inman, L., & Horney, M.A. (2007); Draffan, E.A & Russell, J. (2009); Maurer, S.A (2007); Parr, M. (2011)), leading ultimately to improvements in attainment.

Table 8: Percentage of schools and centres using Digital Papers, 2010 - 2013

Authority / sector	Number of centres in the sector	% using Digital Papers 2010	% using Digital Papers 2011	% using Digital Papers 2012	% using Digital Papers 2013
Aberdeen City	13	15%	38%	31%	54%
Aberdeenshire	17	41%	47%	59%	76%
Angus	8	50%	63%	63%	50%
Argyll and Bute	10	10%	20%	50%	30%
City of Glasgow	39	13%	26%	28%	31%
Clackmannanshire	4	25%	25%	50%	50%
Dumfries and Galloway	17	24%	29%	41%	59%
Dundee City	11	45%	36%	45%	55%
East Ayrshire	9	33%	56%	44%	44%
East Dunbartonshire	9	11%	22%	22%	22%
East Lothian	6	33%	67%	67%	67%
East Renfrewshire	7	29%	43%	43%	43%
Edinburgh City	29	14%	24%	34%	28%
Eilean Siar (Western Isles)	4	25%	25%	25%	25%
Falkirk	9	44%	56%	56%	67%
FE College	21	13%	20%	15%	14%
Fife	25	24%	28%	32%	24%
Highland	31	26%	29%	39%	39%
Independent	77	6%	10%	16%	13%
Inverclyde	9	11%	22%	33%	22%
Midlothian	7	14%	43%	43%	57%
Moray	9	22%	22%	22%	33%
North Ayrshire	11	36%	45%	45%	45%
North Lanarkshire	29	7%	17%	24%	21%
Orkney Islands	5	0%	0%	0%	20%
Perth and Kinross	10	10%	60%	80%	100%
Renfrewshire	12	17%	33%	33%	42%
Scottish Borders	10	30%	10%	30%	40%
Shetland Islands	9	22%	22%	22%	11%
South Ayrshire	8	25%	50%	50%	63%
South Lanarkshire	22	23%	36%	36%	27%
Stirling	8	25%	38%	38%	38%
West Dunbartonshire	5	0%	0%	20%	20%
West Lothian	13	31%	38%	31%	38%
Mean		**22%**	**32%**	**37%**	**39%**

2013 Survey: responses from centres

The SQA team created an online survey which was completed by 64 (34%) of the 188 centres that used DQPs.

Question	Yes	No	Feedback
1. Was the format and quality of the digital papers acceptable?	60 (95%)	3 (5%)	Most centres were happy with the papers. One respondent said the answer box was too small for one candidate's answer, but this should not be the case as the answer box gives as much space as the 'original' paper. Also it is possible for the candidate to insert an additional text box.
2. Were there any errors in the Digital Question Papers used by your centre?	10 (15%)	54 (85%)	Most of these comments related to delivery of CDs rather than errors in the papers. 4 DQPs contained an error, out of 325 papers produced. Given the number of answer boxes added to papers, this was felt to be an reasonable error rate, although SQA will keep trying to improve QA procedures and handling processes of CDs.
3. Are there any ways in which you think Digital Question Papers could be improved?	23 (36%)	40 (64%)	Suggestions for improvements are always worth recording and considering and there were: • 5 comments about problems working with the table format or the heading areas of the Word Digital Answer Booklets (DABs). (The header issue has been addressed by SQA; other difficulties are best tackled by better training for candidates.) • 4 issues with the PDF DABs and in particular the character limit on each page. (This cannot be addressed and so candidate training is required to alert learners to it.) • 2 requests for answer boxes to be added to all papers. (This would require modification of the original assessment which SQA avoids wherever possible.) • 2 requests for 'tick boxes' instead of using drawing tools to select responses. (The drawing tools are felt to be a satisfactory method for these questions.) • 2 requests for online delivery and marking to reduce workload and printing costs. (Not feasible at the present time.) • 1 request for plain text papers for accessing using the Jaws screen reader. (Options for screen readers are being investigated.)
4. Was the delivery of the CDs at your centre satisfactory?	59 (94%)	4 (4%)	Delivery of the papers on CD was in most cases satisfactory. 4 reported dispatch errors (human error; 4,292 CDs were dispatched).
5. We provided one CD-ROM for each subject/level plus one back-up copy. Did you have to use the back-up copy?	11 (17%)	53 (83%)	7 centres used the back-up due to disc errors; 2 used it to speed up the process of installing the papers.
6. What were the accommodation arrangements for candidates who used Digital Question Papers in your centre?	Open ended response		Centres used a wide range of accommodation arrangements. There were 64 replies to this question. The most common type of accommodation was an ICT suite. **Accommodation used** **Number** ICT suite / room 24

Question	Yes	No	Feedback
			Classroom 3 Separate accommodation 10 Support for Learning Base 6 Library 6
7. Did you encounter any problems with the examination arrangements for candidates who used Digital Question Papers in your centre?	12 (19%)	51 (81%)	The problems reported along with the technical issues are summarised below.
8. Did you encounter any technical problems with the examinations for candidates who used Digital Question Papers in your centre? Please include details here of any difficulties encountered with PC equipment, etc.	21 (33%)	43 (67%)	• 7 mentioned old/slow computers; • 6 reported computers crashing; • 3 had printing problems; • 3 reported issues with DABS (see above); • 3 reported issues with DQPs (see above); • 2 had network/server problems; • 2 had a problem with text-to-speech software; • 1 had noise outside the exam room; • 1 had insufficient time to set the computers up; • 1 felt the invigilator was not experienced; • 1 candidate was not sufficiently skilled with the papers. Most of these problems are hardware and software issues that should be addressed in school.
9. Does the SQA Guidance material adequately cover the arrangements that need to be put in place in order to use digital papers?	57 (91%)	6 (9%)	Respondents were generally satisfied with the SQA guidance. There were 2 requests for clearer guidance on setting up network PCs and exam profiles.
10. Did your centre use the new SQASecure option for on-the-day issue of Digital Question papers?	9 (14.5%)	53 (85.5%)	8 of the staff who used this facility reported that it worked well.
11. Did any of your candidates use the text-to-speech feature? If so, please indicate which program they used.	37 (61%)	27 (45%)	The percentage of centres reporting that they used text to speech software is not clear from the survey: 45% of respondents reported that they did not use TTS, whereas 61% of respondents reported that they did (=106%). The most likely explanation is that some respondents used more than one TTS program, and that the overall percentage who used TTS was 55% rather than 61%.

Was text to speech used?	2008	2009	2010	2011	2012	2013
Yes	45%	40%	49%	56%	51%	55%
No	55%	60%	51%	44%	49%	45%

The standalone version of PDFaloud was the most commonly used TTS, but as expected it is far less popular than previous years because it does not function with Adobe Reader X or XI.

Question	Yes	No	Feedback						
			Text to speech tool	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
			PDFaloud	30%	50%	76%	71%	72%	33%
			Read and Write Gold	50%	36%	24%	23%	20%	30%
			Adobe Read Out Loud	10%	9%	0%	0%	NA	16%
			Ivona Minireader						9%
			Other TTS	10%	5%	0%	6%	8%	11%
12. Please list the name, subject and level of all candidates at your centre who used text-to-speech.			28 centres reported that TTS was used in 357 exams, although this will be less than the actual number because several centres noted that it was used in all or most examinations.						
13. Did any of your candidates sitting Digital Question Papers use Comment and Markup tools?	5 (8%)	57 (92%)	The number and percentage of centres reporting that candidates used the onscreen drawing, comment and markup tools remains relatively small. Centres reported using the tools in Biology, History, Chemistry, Geography, and Physics.						
			Comment / Markup tools used?		**2011**		**2012**		**2013**
			Yes		4 (8%)		6 (12%)		5 (8%)
			No		47 (92%)		43 (88%)		57 (92%)
14. For the 2013 Examinations we are investigating the option of distributing Digital Question Papers via the SQA Secure website rather than issuing them on CD. Would this option be acceptable for your centre?	42 (67%)	21 (33%)	Although the option of distributing DQPs online is becoming more popular, a third of respondents reported that it would not be practical for their schools.						
			Provide DQP online?		**2011**		**2012**		**2013**
			Yes		32 (63%)		29 (60%)		42 (67%)
			No		19 (37%)		19 (40%)		21 (33%)
15. Please provide any additional comments here. We would be particularly interested to know your future plans for using Digital Question Papers, your thoughts on delivery systems and anything else you have to say.	Open ended response		There were 35 comments from centres covering a wide range of topics and suggestions.						

Engagement and CPD

Table 9 lists conference and training events between 1 April 2012 to 31 March 2013 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.

Table 9: Engagement and CPD events 2012-13

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**

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