



Research Bulletin number 16

Trialling the Innovative Tool in Scotland

Report of the Level 1 /2 trials of Communication, Application of Number and ICT tests

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1 Background

SQA has been working with the Department for Education and Skills (DfES) on the Core and Key Skills equivalences project since spring 2004. General discussions on what was happening in Key Skills identified the various online developments the DfES were involved in for England and Northern Ireland.

SQA is open to flexible methods of assessing learners in an engaging and motivating way, provided the methods are valid and reliable. Recognising the benefits of online assessment, Learning Connections¹ hosted an introduction day for practitioners involved in Adult Learning provision to review various online initial assessment tools, of which the DfES diagnostic tool was one.

Evidence gathered from participants representing community-based tutors, FE practitioners, the Scottish Prison Service and employers on the day showed a preference for the DfES diagnostic tool over others. Based on this evidence, SQA, in conjunction with Learning Connections, adopted two tools: the diagnostic tool and the innovative assessment tool.

The diagnostic tool is a tool which assists learners and tutors to develop an individual learning plan by identifying the skills and knowledge already possessed by the learner and identifying areas of learning that the learner may wish to focus on. When ready, the learner can then progress to the appropriate level of the innovative assessment tool to generate evidence in aspects of the Key Skills test which may link directly to certification.

The diagnostic tool has been fully developed, tested and is currently used by practitioners offering support for Adult Basic Skills, while the innovative assessment tool is under development, so there is scope for SQA to become involved with the design requirements from the outset.

This is a report into the project we set up to investigate the appropriateness and effectiveness of the Innovative Assessment Tool to Core Skills education in Scotland.

The Innovative Assessment Tool is a series of contextualised on-screen assessment tasks which link directly to certification of Key Skills in communication, numeracy and ICT.

¹ Learning Connections, as part of their remit under the Adult Literacies Curriculum Review, were charged with investigating initial/ diagnostic assessment tools that could be used with learners. As part of good partnership arrangements SQA have with both DfES and Learning Connections, we facilitated this linkage between colleagues interested in onscreen, formative assessment. Feedback is shown in Learning Connections publication — *Report on the pilot of Skills for Life diagnostic assessment tool in Scotland in 2004.*

2 The purpose of the project

We set up an investigation project in July 2004. The investigation would proceed by inviting a number of participants to familiarisation events across Scotland. The purpose of these events was to introduce the participants to the Innovative Assessment Tool and train them in its use. Participants were then invited to try out the tool with their learners and submit an evaluation form to SQA. The evaluations received would determine whether development of the Innovative Assessment Tool for Core Skills was desired by Core Skills practitioners.

We set up an investigation project in July 2004 to:

- ◆ establish whether there was a demand for such an Innovative Assessment Tool in Scotland (principal aim)
- ◆ gauge the extent of that demand
- ◆ identify specific use that an electronic tool would have for our practitioners and learners
- ◆ identify perceived benefits and drawbacks such a tool may have for learners and practitioners
- ◆ confirm equivalence level of competence between Key and Core Skills
- ◆ provide feedback to the designers on any technical or educational points that arose for users

The project involved running three training days in January 2004 where participants were invited along to introduce them to the Innovative Assessment Tool, become familiar in its use then use the tool with learners in their centres and provide feedback on its usefulness.

3 The sample

Invitees to join the project were selected carefully.

We wanted to ensure that our sample fulfilled the following criteria:

- ◆ both urban and rural centres² were included
- ◆ geographical differences were taken into account
- ◆ a cross section of users from each sector using Core Skills qualifications were represented at each event

Secondary schools, colleges of further education, community-based providers and Scottish Prison Service (SPS) and education/training workplace providers were invited to the training events. These training events were held in Glasgow, Glenrothes and Aberdeen. We planned for 18 volunteer participants from schools, 18 from colleges, 12 community based providers and six from the Scottish Prison Service to take part in the training for trials.

² SQA defines a centre as a place for education or training which is approved to offer SQA awards. These are generally schools, colleges, community education, training providers and workplaces

4 Training days

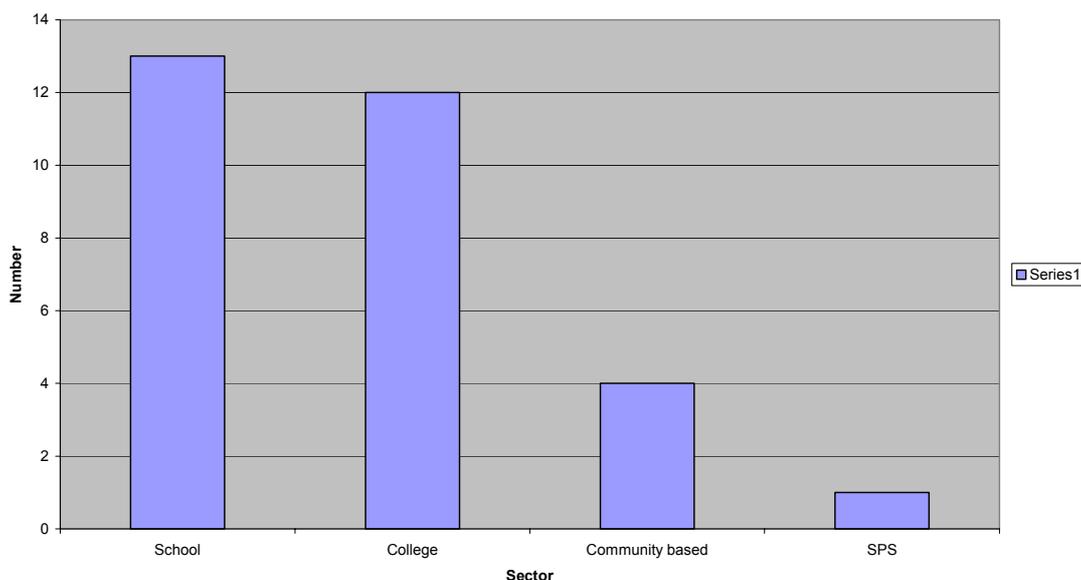
The next stage in the project was to provide training in the use of the Innovative Assessment Tool to those invitees who had expressed an interest in taking part in the trial.

The training day had two functions: one to familiarise tutors with the tool itself prior to using it with their learners; the second to provide us with their own evaluation of the tool in meeting the educational needs of experienced tutors from a range of delivery settings.

Of the 54 representatives invited to participate in the project, 30 attended the training events at the three venues across Scotland (Fig 1a).

The shortfall in numbers was due to invitees: not being able to get class cover; not being interested in the project; not replying; replying but not arriving on the day. Participants on the day were in similar ratio to those invited, maintaining a representative sample.

Fig 1a: Participants in training

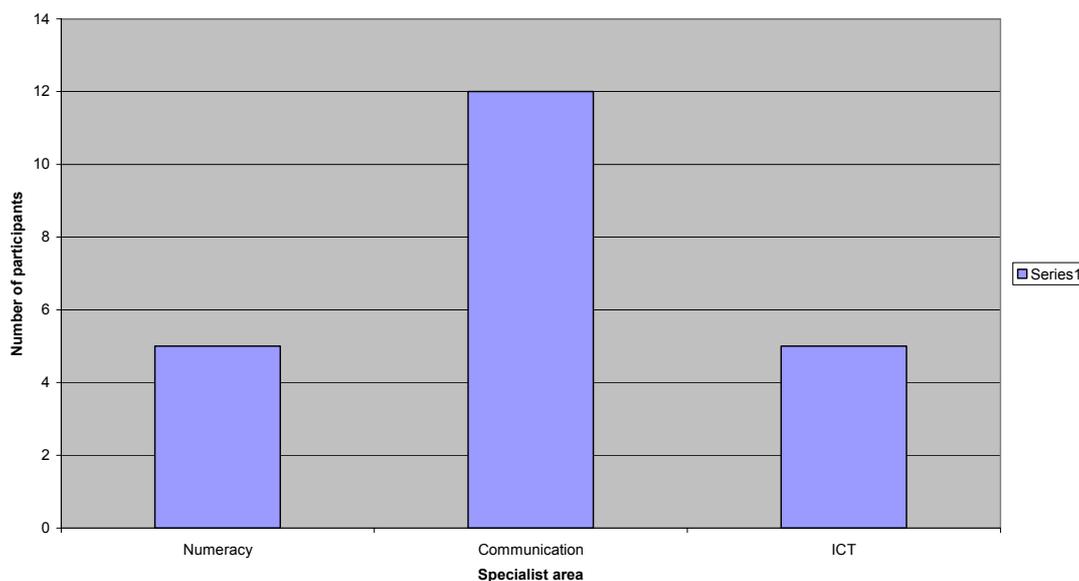


The tool that was trialled was the September 2004 version of levels 1 and 2 across Application of Number, Literacy and ICT. The areas were translated for the trial into Numeracy, Communication and ICT as these are area names more familiar to the Scottish participants.

Of the 30 representatives, 22 were subject specialists; the remaining eight were centre Co-ordinators for Core Skills (Fig 1b).

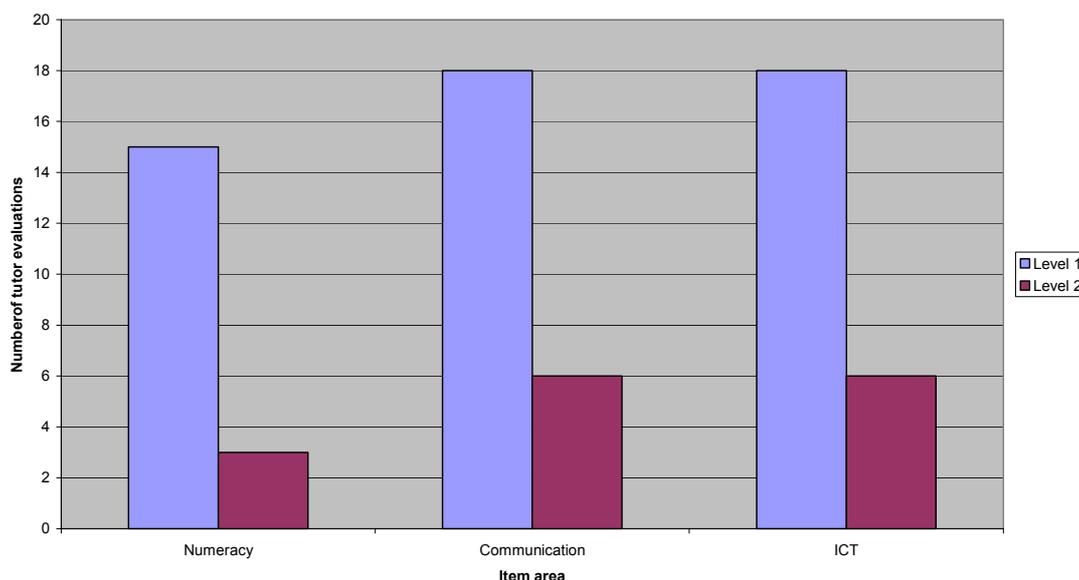
The training day consisted of presentations from the authors of the questions used in the Innovative Assessment Tool; hands-on sessions for participants with informal questioning as they progressed through the tool; and plenary sessions to summarise experience and gather feedback generally.

Fig 1b: Specialists participating in training



A total of 66 evaluations were received from tutors from the training day as most of the 30 participants completed an evaluation form for more than one subject area and provided specific comment about educational aspects/ usability/technical performance in each Core Skill area. (Fig 1c) Where general comments were made by participants about the tool, these have been coded as one comment rather than three (Tables 1 and 2).

Fig 1c: Evaluation of item areas completed, by level



Those that attended the training day were asked to evaluate the tests for each that they tried. The reports focus on the points for further consideration and should be seen against the overall positive report from each of the training events. Feedback given by all participants in plenary sessions at all events was that an electronic assessment tool would be very helpful in aspects of Communication, ICT and Numeracy. Each of the small groups in plenary

sessions gave support for further development. The evaluation reports have been coded against the comments recorded and summarised below.

With hindsight, it would have been better to have spent more time with participants to ensure that the evaluation forms were completed according to the instructions. Many of them used the opportunity to tell us what they wanted us to know about rather than provide the information we were seeking.

(A large selection of singular comment was also collected and this referred to specific questions and subject areas. It is likely that these comments will be forwarded to the designers for consideration. They are not included in the tables below.)

Each of the following two tables should be read against the backdrop of enthusiasm expressed at the events.

Table 1

Individual's positive responses from training days	
Positive comment	Number reporting
Understandable	3
Liked the variety/choice of tasks	4
Liked contextualisation generally	8
Liked ICT level 2 approach	8
User friendly format	5
Clear audio input	2
Reducing teacher workload	2

Table 2

Individual's critical responses from training days	
Critical Comments	Number reporting
Alternative needed for 'exam'/'test'	4
Mapping required to Core Skill framework	16
Feedback essential	7
Depends on ICT skills — beyond some learners' ability	4
Audio needs headphones/off switch	6
Bit boring for non subject specialists	2
Technological problems (particularly crashing in Numeracy)	11
No results/reports available	6
Correlation of levels required for Core Skills	15
Accessibility issues to address	5

Mini tutorials/practice areas needed to link	3
Further proofing of worked examples needed	18
Use of paper required for numeracy calculations	5
Limited calculator function	3
Facility to print e mail/overlapping windows for ICT required	3

The main responses here show that tutors liked contextualised approaches and that there is a demand to see such a tool mapped to the Unit specifications. There was also a need expressed to see feedback for learners featuring within the tool, confirmed in the plenary sessions, and suggestions for how this may be done were discussed. There was acknowledgement that the tool is in development and that further proofreading was required, along with resolution of technological difficulties. This included resulting mechanisms. Briefing sheets used during training are included in Appendices 1 and 2.

5 The centres' pilot with learners

The 30 representatives who attended the training days were invited to take the tool back to their centres and trial it with learners. The 30 representatives came from 24 centres. Out of those 24 centres with trained tutors, 12 trialled with learners. Actual learner results were received from 10 centres — four schools and six colleges covering more than one subject area. Results from the other two colleges could not be retrieved from their hard drive. One community-based provider found insurmountable installation problems; for other willing triallists, a coincidence of barriers such as college inspections/ change of timetable/ availability of computer suites prevented further participation.

The sector and area participation is shown below (**Note:** some schools/colleges trialled more than one subject area.)

Table 3

Sector distribution of centres in pilot, by area			
Sector	Numeracy	Communication	ICT
School	4	2	3
College	7	9	4
Community Based	0	0	0
SPS	0	0	0

Within each sector, various groups of learners were used and feedback was obtained from each of the tutors. Again, these were schools and colleges who participated and the spread of groups is shown below.

In a further two evaluation reports, only the views of staff are given. In these instances one college did not use learners to trial but colleagues; in the other, staff played the gate-keeping role as learners' confidence was deemed to be 'at risk' were they to be involved. These reports are not included in the summary below.

Table 4

Number of group undertaking pilot, by area			
Sector	Number of Numeracy groups	Number of Communication groups	Number of ICT groups
School	4	5	3
College	8	10	6

Note: The actual numbers of learner participants is not known at this stage. This may be possible to report in the next revision as neither results data nor electronic questionnaire responses are yet available for inclusion or analysis.

6 Results of centres' pilot

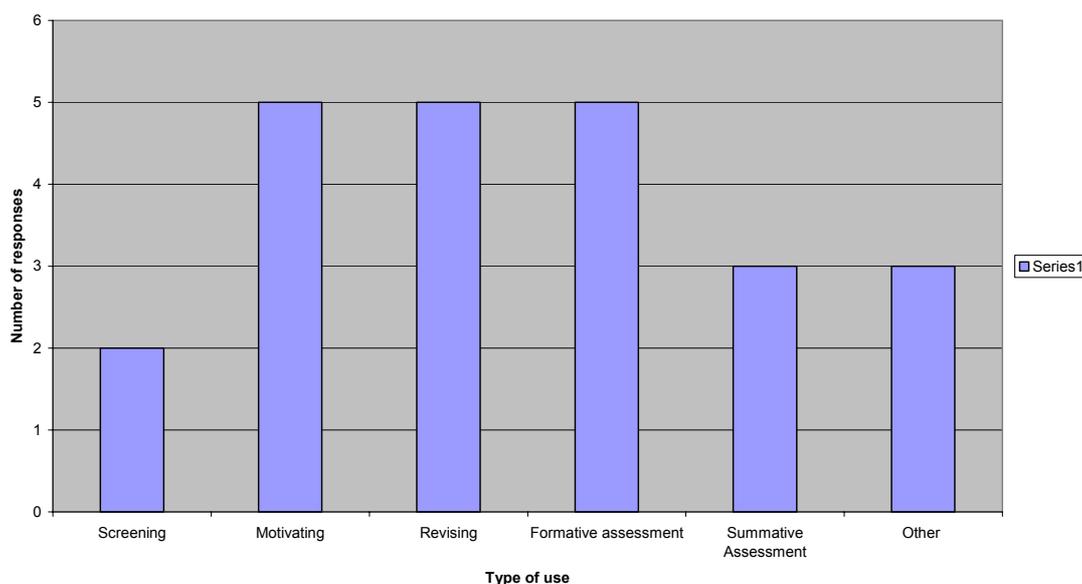
Each centre was issued with an Evaluation Summary Form (Appendix 3) to complete and return and an Action Sheet (Appendix 4) to help with the process. These were collected, along with supplementary commentary notes, learner's comments, various and incomplete result prints, and e-mail correspondence. Instructions on how to collect results could not always be carried out, nor could any completed electronic questionnaires be accessed. The responses below indicate strong engagement with the tool and may be used to address some area specific concerns.

Communication

What would it be useful for?

Centres were asked how they might use this tool and were invited to comment on its potential.

Fig 3: Usage of Tool identified, by type and number



It is clear from the responses that the primary use here would be as part of the teaching/learning process rather than for summative assessment, although a minority would not preclude this. Screening would only be appropriate to sectors other than schools.

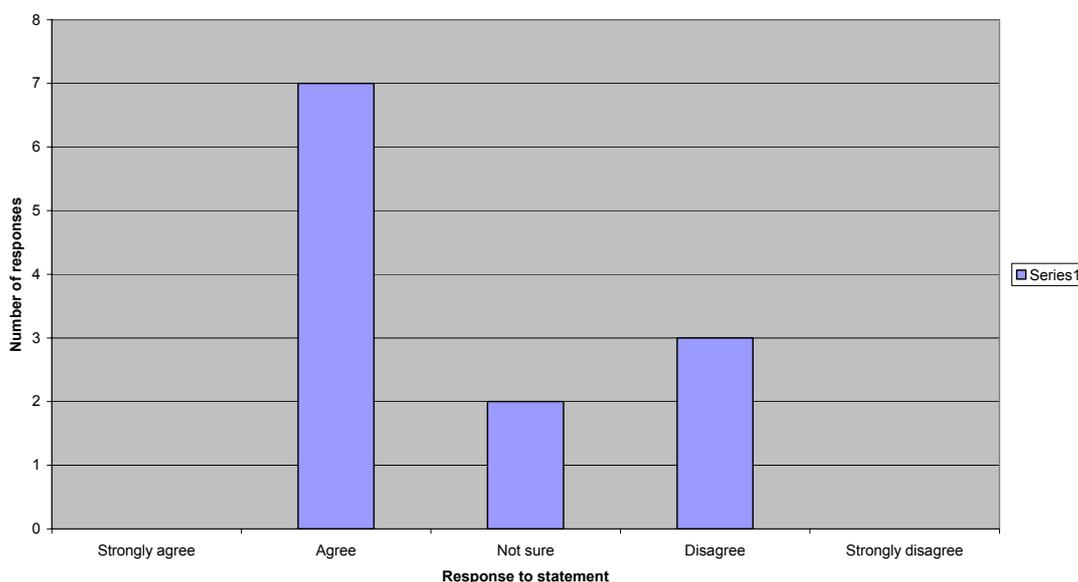
Further comments from tutors included:

- ◆ Some students would be put off by the English accent.
- ◆ Images question is open to interpretation and therefore not helpful.

- ◆ Diagnostic testing — identifying existing levels of students.
- ◆ Useful for finding appropriate level at which to deliver course content.
- ◆ Possibly used for screening if valid questions were written and simple interaction mechanism was used.
- ◆ We assess students on their Core Skills levels on entry to the college. This tool could possibly be used, but I did not find it useful as we screen over 500 students in two weeks. To make a profile for each person by going through their answers would be too time consuming.

How well would the tool fit into the learning programme?

Fig 4: The tool fits well into learning programme



Here we see a less certain response, with positive comments largely dependant on more work being done to align with the Scottish curriculum.

Further comments from tutors included:

- ◆ Agree as long as levels are appropriate and that feedback (detailed) on each question is available to the user. This programme will then be effective to promote a learner focus.
- ◆ Tool could be used for revision work and also motivating learners not using up-to-date ICT materials /resources.
- ◆ Disagree — it has potential but needs a lot of work done.
- ◆ Disagree — does not measure the skills we are interested in. I don't think it starts at a low enough level.
- ◆ Agree — tested understanding, reading skills (of short pieces), analysis, grammar/punctuation but does not help with extended answers.

- ◆ Not sure — reinforces aspects of language that are already taught but I am not sure how much it could be integrated into Higher/Intermediate 2/Intermediate 1 course work. More suited to FE colleges.
- ◆ Not sure as unable to assess at this time. Disagree as listening assessed — not formally assessed in Scotland. Questions involving analytical and evaluative skills did not feature.

In scrutinising these further, we can see a sector split between schools and colleges. It appears that schools are less sure of the fit at present than college respondents. This may be due to Core Skill Unit uptake being significantly lower than qualifications such as Standard Grades at this level and courses such as English and Mathematics with embedded Core Skill competences. Discrete provision is more likely to be offered by colleges, particularly in Communication and Numeracy.³

Which tasks were considered suitable for your learners?

This question did not elicit the fine-grained response expected on individual tasks. Those that had attended the training had provided detailed responses and were not disposed to restating them here.

General comments were given along with suggestions for improvement. These included:

- ◆ Most tasks were suitable. Some of the later questions on punctuation and syntax were perhaps a bit too advanced for this level.
- ◆ We liked most of the questions. Would be willing to collaborate with other institutions on designing subject-specific questions for a question bank.
- ◆ Some instructions too vague — not exact match from level 2 to Intermediate 2. Learner has to remember a lot of dialogue before receiving question page — have to flick between screens to answer questions.
- ◆ All questions included in the test were considered suitable, although some students found the voice-over distracting.
- ◆ Q9 too difficult for Intermediate 2 students. Others too easy — tasks varied in complexity from straightforward to those much more complex.
- ◆ English accent off-putting. Some students wanted a read only (non-audio) option for instructions.
- ◆ Listening definitely not appropriate to curriculum.

Were results as predicted?

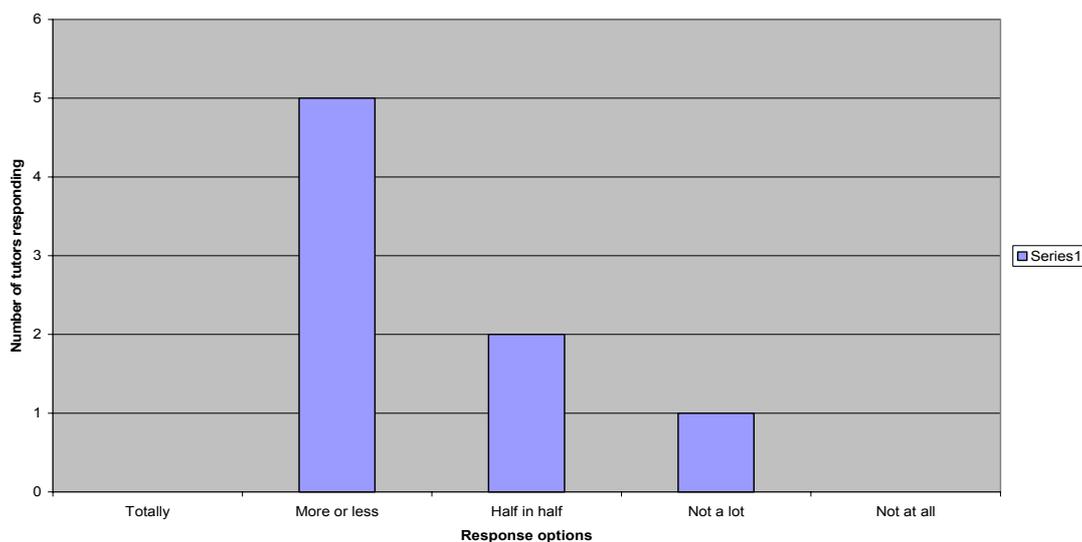
Tutors were asked to select learners who would be comfortable at Intermediate 1 level for level 1 test trials. Other groups were encouraged to take part and for

³ Embedding Core Skills — is a process where Core Skills standards are fully covered in a subject-based qualification
Discrete Core Skills Units — are primarily designed for universal delivery/assessment and are context free

tutor to note their response to the test, as long as it was not likely to damage confidence in their abilities.

Many were unable to answer this question as learner results were not available, and nor was the marking scheme. However, some tutors did add comments based on their observation of the learners during the pilot. The response rate for this question is therefore very low.

Fig 5: Results as predicted?



Further comments from tutors included:

- ◆ The class consisted of advanced ESOL learners with quite a wide range of ability.
- ◆ I only managed to pilot with one learner and she managed to exit without recording her results. From observation, she was not performing well at Intermediate 2 despite being a good student.
- ◆ Some were lower than expected and some higher. Might be due to vague/unreliable questions.
- ◆ Literacy 1 — completed in anything from 20 – 37 minutes (60 minute session).
- ◆ Literacy 2 — completed in anything from 32 – 48 minutes (60 minute session).
- ◆ Several mentioned being unable to access results.

General comments about the communication test?

There were many comments offered by pilot tutors, most of which underlined the comments made during the training. Of these, the most common have been grouped, summarised and listed below. Singular comments are not shown in the list — these can be accessed as required.

The relative strength of comment is gauged here by using three criteria: the volume of related comments of all tutors; the tone used by tutors in their feedback; the related evidence described, as a result of the pilot.

This is seen in Table 5 below:

Table 5

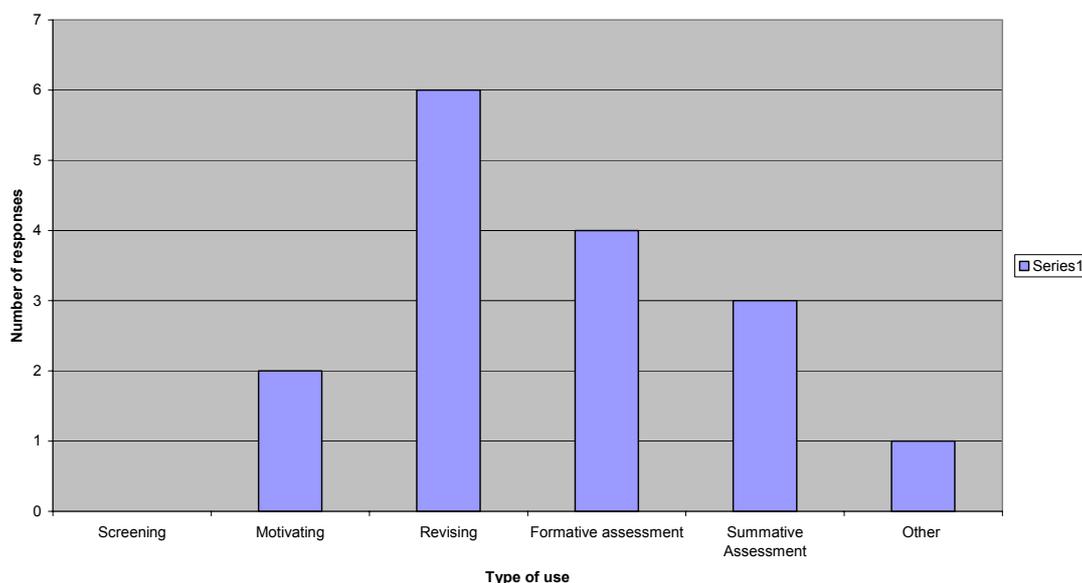
Strength and scope of general responses in relation to Communication	
Comment	Strength of comment
Students liked doing these	Very strong
Results/marking scheme needed	Very strong
Technical problems	Strong
Lack of detailed feedback	Strong
Adapted to Core Skills	Strong
Student needs instant results	Strong
Headphones needed	Medium
Listening not to be included	Medium
Like the way the project is heading	Weak
Random questions needed	Weak
Better tool available on market	Weak
Students became bored	Weak

Numeracy

What would it be useful for?

Centres were asked how they might use this tool and were invited to comment on its potential.

Fig 6: Usage of Tool identified, by type and number



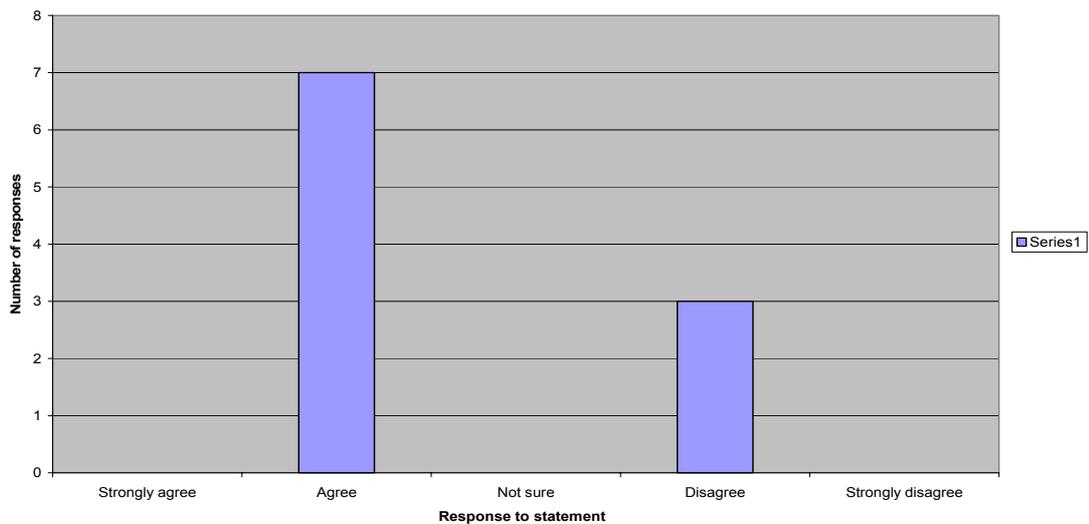
We see here a link with the teaching/learning process rather than summative assessment. We also see that no link is made with screening usage, although one comment refers to possible use in screening. A much higher proportion of tutors thought that this tool would be good for revision. One tutor saw no use, anticipated risk to confidence of learners, and cancelled the pilot for her students.

Further comments from tutors included:

- ◆ too risky for copying if students all get same questions
- ◆ appropriate for Foundation grade Maths group or poor S5 Intermediate 1 Maths (not S4 General Maths group)
- ◆ questions engaged students' interest — motivational

How well would the tool fit into the learning programme?

Fig 7: Tool fits well into learning programme



There appears to be a close fit here with schools, but less so with colleges. Those who disagreed with the fit were critical of access to computer facilities or inability to provide definitive level of Core Skill rather than fit with learning covered.

Further comments from tutors included:

- ◆ More tests based on topics to fit in better with learning programmes, ie 5–14 strands, trig, etc.
- ◆ Could be used with pupils in earlier groups (S2/S3).
- ◆ Could fit as additional but not an alternative tool, yet. level not appropriate. for beginner nor advanced enough for higher level learners.
- ◆ Although questions were not challenging enough to test this group's general maths skills, most questions were not trivial and encouraged them to think.
- ◆ Raises practical issues for timetabling space in computer suites for classes of 30 pupils!

Which tasks were considered suitable for your learners?

Responses were provided for many individual questions with the following noted as requiring attention. This was not in all 12 cases — half the tutors thought all, or most, of the questions suitable in principle. Those questions that raised queries are listed below and show a wide range of concerns for the tests

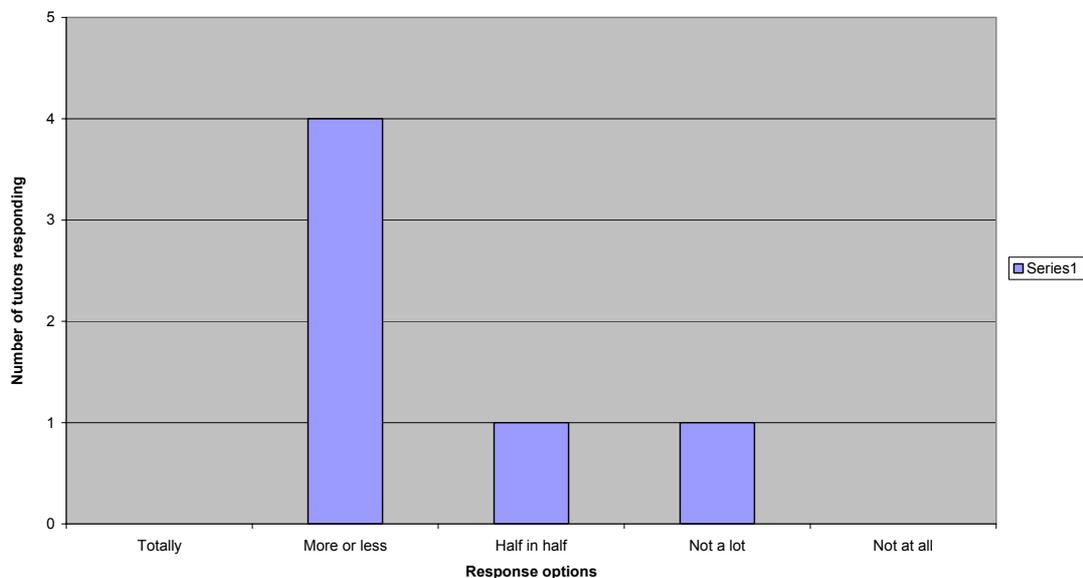
Question number	Query
1	Difficulty understanding what was implied Too trivial
2	Too trivial
4	Not enough of the scale can be seen Confusing
5	No calculator
6	Calculation display should show sum being done. Calculator doesn't show Bodmas
8	Calculator fails to answer $35 \times 5 + 3 \times 7.50$. Suggest calculator is changed to Bodmas.
11	Level?
13	Learner should be given pencil and paper for rough working
14	Floor plan has too much info - too confusing
17	Difficulty understanding what was implied Level?
19	Using a calculator is too simple
20	Very good as drag and drop gave extra options to choose from
22	Not testing volume as all you need to do is simple addition
26	Difficulty understanding what was implied
28	Difficulty understanding what was implied
29	Too difficult for student

Further comments from tutors included:

- ◆ too many instructions at beginning left many confused
- ◆ not as challenging overall as their exam is going to be
- ◆ assumed level of comprehension to interact with software
- ◆ many learners thought they were too easy — would like to match their perspectives against marks achieved for each question. Final marks help neither student nor teacher

Were the results as predicted?

Fig 8: Results as predicted?



Not many tutors commented here – only practical difficulties accessing results were referred to, which may have hampered comparisons.

General comments about the numeracy test?

There were comments offered by pilot tutors, many that either related to Maths in school or that underlined the comments made during the training. Of these, the most common have been grouped, summarised and listed below. Singular comments are not shown in the list — these can be accessed as required.

The relative strength of comment is gauged here by using three criteria: the volume of related comments of all tutors; the tone used by tutors in their feedback; the related evidence described, as a result of the pilot.

This is seen in Table 6 below:

Table 6

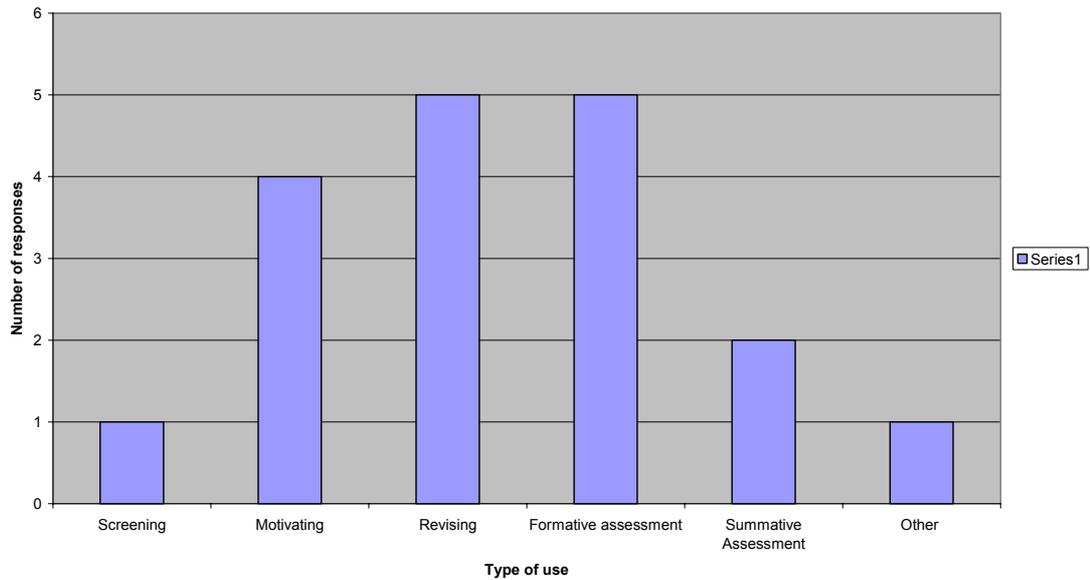
Strength and scope of general responses in relation to Numeracy	
Comment	Strength of comment
Students enthusiastic about the experience.	Very strong
Reporting/resulting problems.	Strong
Accessibility/tracking for dyslexic people — missed pen and paper.	Medium
Difficulty maintaining confidentiality of responses.	Medium
Staff enthused.	Medium
Potential for use if used to point out areas of difficulty and linked to remedial work.	Weak
Instructions not clear (calculator use/not use).	Weak

ICT

What would it be useful for?

Centres were asked how they might use this tool and invited to comment on its potential.

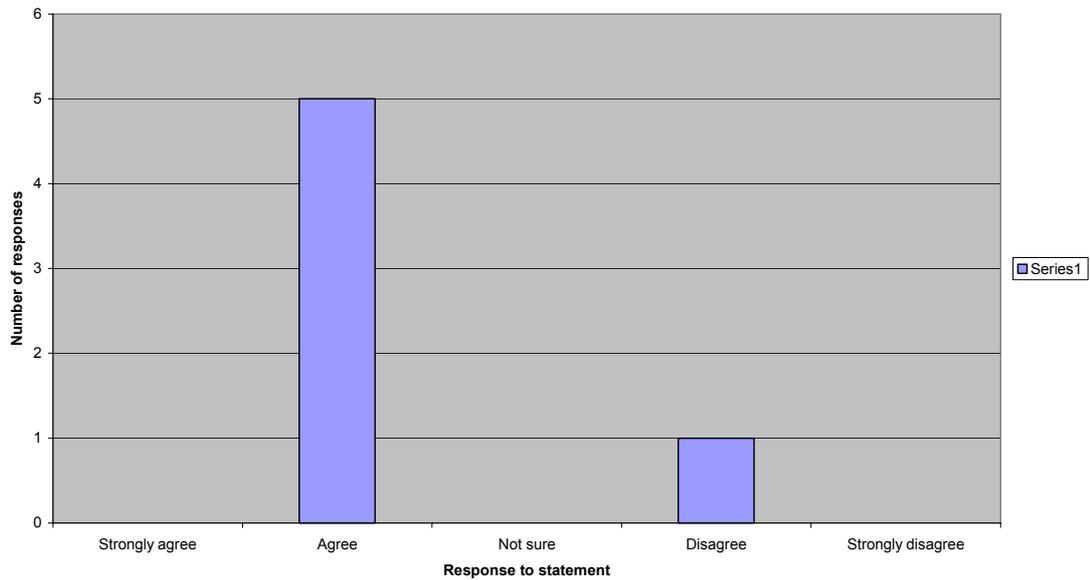
Fig 9: Usage of Tool identified, by type and number



Many more uses have been identified for ICT tests, primarily in the teaching/ learning process. Limited potential was reported in summative assessment. It was also suggested that this could be used for learners to initialise and prepare for online assessment materials when used across the board.

How well would the tool fit into the learning programme?

Fig 10: The tool fits well into learning programme



There is a clear indication of agreement of fit from five out of six tutors who responded here.

Further comments from tutors included:

- ◆ disagree — tool needed to be more focused as it catered for too wide an area
- ◆ agree — some modifications required
- ◆ useful for S1/S2 group
- ◆ necessity of having information for pupils about how much each question was worth and how many marks they had gained so far

Which tasks were considered suitable for your learners?

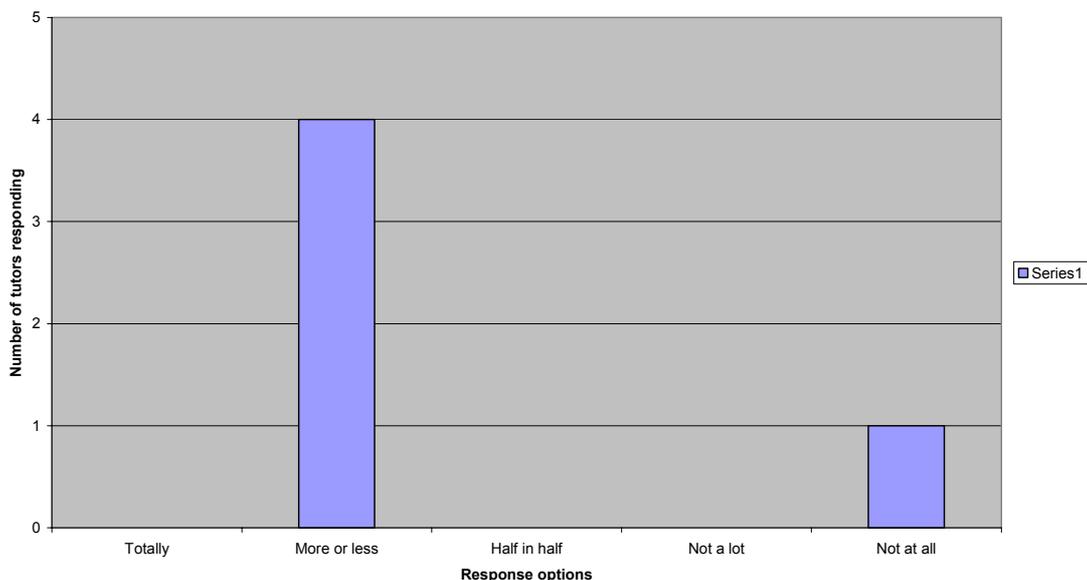
The tasks were considered as suitable by most.

Some responses were provided for some individual questions, with the following noted as requiring attention. Those questions that raised queries are listed below but did not reflect any great concerns for the test.

Question number	Query
4	Unclear what learners were to do. I wanted space for feedback. Not suitable for Comp Int1.
5	File names and extensions not clear language, level not appropriate.
8	Not suitable for Comp Int1.
15	Unclear instructions
18	Ambiguous — select curly one?
19	No multiple choices.

Were results as predicted?

Fig 11: Results as predicted?



Generally these were in line with expectations. One respondent could not install in time to trial with learners and has not ticked any option.

One anomaly is noted — two children did very much better than expected, while four ended up much further down the list.

Some results not accessed for comparison

General comments about the ICT test

There were comments offered by pilot tutors, many that repeated comments made during the training. Of these, the most common have been grouped, summarised and listed below. Comments from pilot tutors are not shown in the list — these can be accessed from the author if requested.

The relative strength of comment is gauged here using three criteria: the volume of related comments of all tutors; the tone used by tutors in their feedback; the related evidence described, as a result of the pilot.

This is seen in Table 7 below:

Table 7

Strength and scope of general responses in relation to ICT	
Comment	Strength of comment
Students enthusiastic about the experience.	Very strong
Reporting/ results for tutors/ learners needed.	Very strong
Ongoing feedback needed.	Strong
Technical difficulties in running.	Medium
Text too small for some frames.	Weak
Good clear screens.	Weak
More specific learning materials needed for this tool.	Weak
Mapping to specific outcomes needed.	Weak
Possibility of seeing others answers.	Weak
Depended on literacy skills.	Weak

7 Interview follow-up with staff

Interviews were conducted with three teachers who had taken part in the pilot; it was not possible to confirm arrangements with the selected college staff or community-based providers as they had not had been able to conduct the pilot with learners.

Each teacher specialised in one of the subject areas — English, Mathematics or ICT.

The interviews were standardised by using one prepared schedule and one interviewer. The interview schedule is in Appendix 5.

Feedback

All teachers found no problem in setting up or using the tool with pupils. All relied on their technical support to install. The students were clear on what they had to do, and so the teacher was able to get on with other work in English. The triallists, all third year pupils, reported enjoying doing it.

The tool doesn't fit in with the current school programme as there are no Core Skills offered discretely, so comparison with Core Skills levels was impossible. It could be compared with Standard Grades at lower levels. Quite liked the grammar work — could there be questions on analysis as that is missing from the tool? There was also request for Access level work to be developed.

Recording student evidence produced a critical response — the tool doesn't tell you what the question was and pupils don't know the marks for each question. You can get a total but not an 'out of', which was very disappointing. Another thought that it seemed primitive as they were not able to analyse the way they would want to in ICT. They thought that needing a password to get into the database was unhelpful for staff and pupils. One talked for some time about the difficulties of getting evidence and of routing it to SQA. There were some good practice packages there on spreadsheets and legal databases.

Generally the pupils use *Successmaker* in S1 as materials are more relevant/colourful/interesting than these.

All were in favour of developing this further and were quite specific about the form it should take. There should be a series rather than a one-off. There should be formative and bite size chunks with a bite per topic, feedback etc as part of learning in a Unit.

Improvements suggested are: better pupil feedback, knowing what each question is aiming at; getting pass marks for each.

There followed considerable discussion on the difficulties of being able to pilot the tool itself as school timetables not equipped to deal with it — however getting the computer room is still easier than getting books! Some pupils thought it wasn't for them and commented on the jam-making questions. Teachers were surprised how quickly it was completed — 20 to 48 minutes. All teachers thought their pupils enjoyed using the packages and from what could be seen, most appear to have passed. Some might be useful to help identify language problems, eg at the end of S2, even with current content, but would be helpful to have different scenarios to draw on. Teachers thought this format could be more attractive to some pupils than paper-based versions.

One spin-off from the pilot of the tool to schools was their introduction to Core Skills — pupils struggling at Standard Grade could be doing a Core Skills Unit, with this package being quite helpful. The variety of responses was viewed favourably, particularly for this group.

8 Conclusions and recommendations

While on their own the results from this trial appear limited, they reinforce views expressed through Learning Connections review, informal meetings with practitioners, regular contact with centres, and the plenary sessions of training. The participants at the recent SQA conference, who were exposed to the Innovative Assessment Tool, further confirmed this position.

In relation to the six main aims of the project, we can conclude that evidence shows that:

- 1 There is demand within Scotland for an electronic tool that is part of the teaching/learning process and which may also be used to demonstrate competences for certification. This applies to all sectors.

Learners were significantly engaged with the tool in both school and college pilots.

Recommend: Development role for SQA within DfES and CCEA partnership is further explored, with focus on assessment for learning journey.

There are considerable amendments required, as identified during the pilot phase and from informal discussions. Major amendments are to make sure there is correspondence with specific Outcomes and Performance Criteria for Core Skills at identified levels; detailed feedback on learning and achievement needs to be an integral part of the process, being provided directly to learner and tutor; significantly improved reporting/resulting mechanisms are required. These are coupled with practical difficulties of being able to access the computer suite within institutions.

Benefits were highlighted as increasing learner enjoyment of the learning process and providing an alternative for some standard grade learners who struggle to achieve in core subjects.

Recommend: Mapping of Innovative Assessment Tool items to Core Skills specifications and tagging of items to curriculums by joint development team; seeking links between screening, diagnostic, formative and summative functions of electronic approach; training for specialists in Core skills to be sourced for authoring innovative items appropriate to Scottish curriculum; reporting mechanism be amended before any further action is considered.

- 2 No reliable conclusion can be drawn on equivalences as a result of this pilot. This is largely due to results not being available for comparison with Key Skill trials. It is further compounded by items which were outwith Scottish curriculum being included in the tool, and there were also some unreliable questions and technological difficulties.

Reports from tutors' observation indicates that the levels are roughly equivalent, but further work would be required for more indicative measuring.

Recommend: Small pilot study is conducted, targeted at learners already competent at Intermediate level and for whom results can be accessed easily for each tagged question.

- 3 A considerable amount of qualitative feedback has been collected from this pilot from a range of learners and practitioners. There is evidence of the positive perception of the tool amongst both learners and tutors, with detailed suggestions for improvement and change to meet their needs. Some of this may well have been overtaken in subsequent versions of the Innovative Tool. There is no data available which adequately shows performance characteristics of each test item.

Recommend: Feedback is made available to designers for consideration. Future versions should be considered positively for piloting in Scotland.

9 Appendices

Appendix 1

Core Skills Innovative Assessment Project January 2005

Background to the project

SQA are always open to flexible ways of assessing which are engaging and motivating while still retaining validity and reliability. To this end, we are currently involved in a number of projects which use new technology. Similar activity is taking place in England and Northern Ireland where the Innovative Assessment tool to be used in this project is under development. This tool has been designed to assess Key Skills in a very active and interesting way. Initial reports indicate it has been well received by tutors and learners and this has encouraged SQA to investigate the feasibility of adapting the tool to use it in Scotland to assess Core Skills.

How the Innovative Assessment Project (IAP) will work

To allow us to gain enough data across sectors to gauge its usefulness to tutors and learners, we have invited 54 representatives across 3 project sites to participate in trialling the approach. There will be 4 steps in this Project

Step 1: Briefing tutors, ensuring technological capability, gauging first impressions, discussion of support needs (Week beginning 17 January)

Step 2: Using the tool with learners and logging positive and negative issues (18 January – 18 February)

Step 3: Evaluation of the tool, by survey and interview of tutors and learners (By 25 February)

Step 4: Report recommendations of IAP and dissemination of results (By 25 March)

We hope you will find the project stimulating and SQA are grateful for your involvement. We appreciate the efforts you put into this and encourage you to feedback any thoughts you may have on the value of this approach – to you and the learners you work with.

Appendix 2

Innovative Assessment Tool		 SCOTTISH QUALIFICATIONS AUTHORITY	
Evaluation form			
Please complete the following information			
Name			
Organisation			
Training venue		Date	
Subject Tested	ICT (Q1 to Q24)	Literacy (Q1 to Q20)	Numeracy (Q1 to Q29)
Please use the space below to make comments on each question.			

Please continue comments here

Appendix 3

Innovative Assessment Tool Evaluation summary form		 SCOTTISH QUALIFICATIONS AUTHORITY	
On completion of trialling, please complete the following information			
Name			
Designation			
Organisation			
Contact details	Telephone number	e-mail address	
Subject Piloted	ICT (Q1 to Q24)	Literacy (Q1 to Q20)	Numeracy (Q1 to Q29)
<p>Our organisation found this assessment tool to be useful for:</p> <p> <input type="checkbox"/> screening <input type="checkbox"/> motivating <input type="checkbox"/> revising <input type="checkbox"/> formative assessment <input type="checkbox"/> summative assessment <input type="checkbox"/> other (please specify) </p>			
<p>Our organisation found using the tool fitted well into our learning programmes.</p> <p> <input type="checkbox"/> strongly agree <input type="checkbox"/> agree <input type="checkbox"/> disagree <input type="checkbox"/> strongly disagree </p>			
<p>Comments:</p>			

Comments continued:

Which tasks did you consider appropriate for your learners?

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9

Q10

Q11 Q12 Q13 Q14 Q15 Q16 Q17 Q18 Q19

Q20

Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29

Comments:

Were the results of your learners as predicted?

Totally

More or less

Half and half

Not a lot

Not at all

Comments:

General comments:

Thank you for participating in this pilot and for taking the time to complete this evaluation form. Please return the completed form and a copy of your learners' results to:

Amanda Gray
Project Officer
Scottish Qualifications Authority
FREEPOST SCO4704
Glasgow
G2 7BR

Appendix 4

Core Skills Innovative Assessment project, 2005

Action sheet

Action	Comment	Done	Issues
Select group	As far as can be predicted, select a group at Intermediate 1 level and reckon on an hour session.		
Explain how the trial will work	Make sure they know it is not a test. There may be parts that you decide are good evidence but this is not the primary aim. Make sure the programmes are ready to use before the learners arrive. You should try it out a few times yourself before using it with learners. Log any thoughts you have about the approach/ items as they arise — you'll forget them later. Some learners may lack confidence in working with computers — reassure them that their computer skills are not in question here. These are the sort of issues we want to know about. Remind them at the end of the session to please fill in the evaluation questions too.		
Get permissions signed	We can make all data anonymous but still need to gain permission from participants that we can use it for research purposes.		
Run the sessions	Good luck!		
Keep log during sessions	Try to log as many issues/thoughts as you can, no matter how trivial. It really is valuable for the research and will be useful for follow-up interviews — keep a copy to remind yourself.		
Send materials back	You are welcome to keep the software at the end of the trial. What SQA does need back from you are all logged comments, completed evaluation questionnaire for you as tutor, permission slips signed and results for each learner, with their evaluation of the assessment tool. You can do this by e-mail if you want. Please let us know when you are finished.		

Appendix 5

Innovative Assessment interview schedule

Name:

Centre:

Interviewer:

Subject:

Date:

1 Ease of setting up?

2 Clarity of use for tutor?

3 Clarity of use for student?

4 Comparison to previous approach?

5 Recording student's evidence?

6 Level most suited?

7 Extent to which it met that level?

8 General issues needing addressed

9 Specific issues

10 Desirability of developing this further

11 Improvements you would like to see

12 Any other comments