Computer Baseline Testing

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Some questions and answers related to baseline testing.

1. What is the purpose of baseline testing?
Computing is effectively a new subject in the national curriculum. This provides a unique opportunity to find out what children know about a subject before it is formally taught and how much this changes over time as formal teaching becomes embedded in the school curriculum. If we provide a test that is based on the new National Curriculum Programmes of Study and get a representative sample of children to do it prior to Year 7, Year 8, 9 and Year 10 we will get an idea of any systematic knowledge improvements from general education prior to the start of formal teaching. We can use this to understand the way learning takes place with teaching over time both in absolute and relative terms.

Once we establish a database representative of any cohort and its progress, we can enable teachers to place their individual pupils and their school within that context.

2. Will this data not get distorted by use in high stakes performance measures?
The great advantage of this as a community project independent of government or government finance is that the community owns the data. Individual data for learners or schools will be available to the teacher designated as the Principal Assessor for the school. The Principal Assessor will be responsible for how that school's data will be used. The only data that will be made publicly available will be aggregated cohort data from which no individual school can be identified. This will enable schools to use evidence from assessment objectively for local improvement referenced to a national sample of data.

3. What is the assessment framework on which the test is based?
The assessment criteria are derived directly from the new KS3 POS for Computing. The questions are based on the assessment criteria used for the NAACE/TLM Level 1 certificate in Open Systems Computing. These criteria areregulated by Ofqual and were deemed suitable by the DfE for their high quality qualifications category that attracted league table points (up to 2016). The advantage of this is simplicity and straight forwardness placing low administrative demand on teachers but it is scalable to more detailed provision for curriculum planning and formative assessment to any preferred system. This includes the CAS progress frameworks which provide more detailed scaffolding for formative assessment. We will build further links and structure to these resources in such a way as to make them as easily accessible to teachers as possible but without forcing anyone into any particular set of bureaucratic procedures.

The test is designed to be simple to deliver but it has to differentiate performance and so there are a range of questions of different difficulties. These might appear alien to those new to computing (both teachers and pupils) but we need to start somewhere. Given the time pressures, pre-testing has not been possible and the organisations cooperating in the provision of the test are not able to say objectively how well it will work. We will not know for certain how well the test works until we get data back from trying it and we will make any future amendments to it based on the outcomes of the first implementation. We are grateful to the community for helping us in this process.

4. Is the test self-marking?
We have chosen to use a multiple choice test because it is self-marking and we can therefore make

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it free for schools. We don't need external markers and the marks data can be collected and aggregated with minimal cost in terms of the test administration and more importantly in your time. We want you teaching, not wasting any more time than absolutely necessary on test administration. Instant feedback from tests will be possible and the more that take part, the more reliable the data will be.

5. Are the questions available to see prior taking the test?
Yes, in the initial phase, you can see the test at http://thelearningmachine.co.uk/year-7-computing/ but please keep it confidential as we want pupils to see these for the first time when they take the test. Given that there is no pressure from league tables etc on this test there is no reason for it to be "leaked" but we need everyone to be professional about this. We will vary the test but care will be taken to ensure it reflects the programmes of study and that standards expected are consistent and fit for purpose. Thanks to those that have already contributed valuable feedback. We take all feedback on board and we will use it to make improvements in the future.

6. Is using a test suitable for progress measures?
This is a good question. We think it is very likely that performance in these tests will correlate well with future performance in e.g. GCSEs but there will still be a lot of individual variation. The tests will give an idea but not necessarily the full picture for any individual and teacher judgment is still going to be needed. The point of doing it by a MCQ on-line test is that it is probably the least expensive, least complicated method (Teacher time as well as the cost of delivery) of getting some useful if not "all singing and dancing" results. It should be enough, at least to start with, to show OfSTED you are doing something positive on evidence based progress tracking from the outset as well as being useful for your departmental planning. We have further free support from a cloud based evidence management system that can be used for more formative assessment for those that want to do this. It is up to individual schools to decide which frameworks and formative assessment tools they want to use for more detailed day to day progress measures. The test should be compatible with any of these supplementary methods.

More details about background

The computingresources.info [6] site was initiated by a loose coalition of interested professionals chaired by Bob Harrison. It has been significantly directed by the thinking of Dr Carol Porter and Tim Scratcherd in establishing a NAACE project for resource to exemplify standards. Complementing the plans for exemplification of standards, there is baseline testing and the potential for progress measures coming directly from grass roots discussion in the CAS forums. This is of interest to the Mirandanet research community owing to the empirical data that can be generated related to digital learning. The aim is to collectively provide resources that will benefit all, whether examples of learners' work or aggregated test data to help teachers place their pupils in the context of the cohort. It is illustrative of the devolution of centralised provision to the grass roots community that has been initiated by the revolution in communications technologies, open standards and the licensing of intellectual property to enable sharing.
What you see there should not be interpreted as either fixed or definitive. If there are errors or omissions, please get in touch with the editing team. We encourage people to join the editing team in order to strengthen it and to make it easy for you to participate in making this site better. The Open Source principle of release early and release often is embedded in this project. Some information may be incomplete but provided early to try and keep the information flow as up to date as possible. The standards exemplification and baseline testing is complementary to other initiatives such as the CAS progression framework, NAACE assessment group and TLM's new qualifications in Computing. The aim is to provide flexibility so that teachers can decide the ways of working that suit them and their pupils best.

he idea of baseline test is to measure progress from the first attempt. Do one of the baseline tests then do another after 6 months. We will aggregate attainment and progress measures from these and feed them back to you. In this way you will have attainment and progress measures across the whole of Key Stage 3.

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The question with the flowchart is a bit difficult to navigate on screen. **We recommend printing the diagram** out so that pupils can refer to the hard copy while doing that question. There is more detail on this page [7] but the procedure described for taking the test is now out of date so use the video linked above. You can download the flowchart image from here [8].

We are building SOL and Lesson [9] plans to complement the baseline. There is a full evidence management system for **formative progress tracking** through the POS on the learning site explained here [10]. You are free to use as much or as little of these as you like.

You can use the test for **anyone.** Year 7 is the highest priority but any other year groups new to computing can do it and some teachers have taken it too. Your results will be anonymous.

If you have any problems, please contact us. Please spread the word as the more that take the test the better the data for everyone.
var disclosure = new Houdini('[data-houdini-group]', { isAccordion: true });

Source URL: https://baseline.theingots.org/computer-baseline-testing

Links
[1] https://www.computingresources.info/?page_id=44
[2] https://groups.google.com/forum/#!forum/key-stage-3-baseline
[3] http://www.naace.co.uk/
[4] https://www.computingresources.info/?page_id=305
[5] https://tlm.org.uk/qualifications2/certificate-in-open-systems-computing/
[6] https://www.computingresources.info/
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