Assessment tools at the Foundation Stage

A comparison of the use of assessment tools in the Foundation Stage (*PIPS* vs. *Lucid* vs. *Smart Cat Profiling*).

Executive summary

- Software systems that assess various capabilities of children aged 4 and 5 years are increasingly being recognised as important tools by Foundation Stage teachers, Head-teachers, Local Authorities and the DfES.
- This is a detailed report, using TEEM's evaluation process, of the three software systems that are currently available.
- The report compares the performance and benefits of systems from *Lucid* Research Ltd, the CEM Centre at Durham University and Screen Learning. The evaluation was conducted by professional teachers who are familiar with the use of skills assessment software and who teach children in reception at State Primary schools.
- Each of the assessment models featured in this comparison looks to the results achieved from a specific set of activities carried out by each child. Teachers particularly valued those assessments that encouraged independent activity by the children (as time - and in particular, the lack of it – is significant in carrying out the assessments with a class cohort.)
- To cover such a wide range of activities has led to the development of assessments that are question based, with no unifying context. Screen Learning's *Smart Cat Profiling* assessments differ however, in that they offer the children characters that they can relate to and a set of contexts in which these characters play.
- These three tools offer contrasting models of assessment and use the practical support that ICT can give in very different ways. All provide data to support teacher's judgements. **The new context-based approach offered by *Smart Cat Profiling* provides a serious challenge to the question-based formats of previous generations of assessments, and offers a classroom experience that teachers felt supported and enhanced the teaching and learning in the classroom.**

Comparison of the use of *PIPS*, *Lucid* and *Smart Cat Profiling*

This document is the result of a piece of work undertaken by TEEM. Two teachers at the Foundation Stage, one who has been using *Lucid* and another who had been using *PIPS* for assessment both wrote an evaluation of these pieces of software. They then looked at *Smart Cat Profiling* and wrote an evaluation of that too. This document draws together the comments and experiences of the teachers in using these assessments with their Foundation children.

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Content comparison

Lucid and *PIPS* both have a history of use in the assessment market place, and were developed before ICT was very established at the Foundation Stage. As a result, both have a characteristic of using ICT peripherally, with much of the assessment driven by the teacher or other adult in the classroom. *Smart Cat Profiling*, in contrast, has been developed by a company with a background in developing computer games for young children, and has at its heart, the use of the computer by the child to create the assessment. A new version of *PIPS* – e*PIPS* – is now available and this has only been reviewed in a demo version by the teacher.

Children now come into school from all sorts of different pre-school situations, and the assessment that happens at the beginning of Reception is important as a measure of the skills that children have. The challenge that this process presents is often increased by the limited time the teacher has available to complete the task.

A direct comparison of the content of each of the three assessments is difficult – they use different language to describe the activities, and rely to a different degree on the judgement of the teacher as to whether the child has fulfilled the task. There are broad similarities between the expected coverage of the tasks. This table shows the areas that each of the assessments cover and the language used by the publisher to describe the task.

***Lucid* Baseline Assessment**	***PIPS***	***Smart Cat Profiling***
Mathematical skills Recognition of shape and pattern Understanding of ordinal position Basic number recognition Simple addition and subtraction Literacy skills Letter recognition Phonological skills Awareness of print Rudimentary reading and spelling Communication Personal and social skills	• early reading, • early mathematics, • phonological awareness • short term memory	• Fine motor skills • Hearing • Empathy ('Sally Anne test') • Emotional recognition • Sequencing • Mental arithmetic • Sound matching • Reading • Spelling • Short term memory • Language comprehension • Colour perception

Smart Cat Profiling is the only assessment that explores hearing, fine motor skills, empathy and emotional recognition as well as colour perception.

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Multi-lingual use

12% of all pupils in the UK have English as an Additional Language (EAL).
It is important to note that only Screen Learning's *Smart Cat Profiling* can accommodate the needs, as specified by the Qualifications and Curriculum Authority (QCA), of assessing children in their mother tongue.

Functionality

The table below compares the functionality of the features of the tests in the classroom.

	***Lucid* Baseline**	***PIPS***	***Smart Cat Profiling***
Adaptive questions	Yes	Available only on the e*PIPS* version of the assessment	Yes
Ability for children to use independently	No	Not on the CD-ROM or paper-based versions.	Yes
Installation required	Yes	Yes	No, web-based
Security of assessment at upper and lower ends of ability range	Yes	Yes	Yes, also has sign language support
Automatically compiled reports for teachers and parents immediately available	Yes	No	Yes
Accommodates EAL			Yes
Fits Foundation Stage Profile			Yes
Reports for Teachers & Parents	Yes		Yes
Includes signed instructions for deaf children			Yes

Method of use in the classroom

Administration requirements

Each of the three assessment systems require data to be entered about the children who are taking part – name and date of birth in particular. The entry of this data varies in degree of difficulty with *Smart Cat Profiling* being seen as particularly simple to use, and supporting the independent use of the software in the classroom by the children through the provision of simple coloured shapes to be clicked on to start the next game. The children enjoyed the independence that this offered them to complete the games.

Completing the tasks

PIPS and *Lucid* both specifically require the time of an adult throughout the assessment. This is suggested to be 20 minutes in the case of *Lucid* Baseline and *PIPS*. Using *Lucid*, teachers can either enter the answers the child gives, or allow the child to use the mouse themselves. The CD-ROM version of *PIPS* anticipates that the teacher will enter the child's answer to the question presented. This dedicated time was seen as a heavy requirement in the reception classroom, particularly in a scenario where the tests were administered early in the school year and then again during the summer term. *Smart Cat Profiling* can be completed at different times, and is framed in a games context so that it is available for independent use by the child. *Smart Cat Profiling* recommends that children do no more than 3 activities in a day. The software keeps track of which

activities the child has completed, and will offer the next activity in a sequence defined by the teacher, or at random. Headphones are a requirement of Smart Cat Profiling, which both helps to focus the individual child on the task, but also allows for a basic hearing task to ensure that children who effectively compensate for hearing loss are not overlooked.

Views of teachers

Objective assessments as offered by each of these resources are becoming a central place in the activities of Reception classes. The objectivity of the assessments were seen by all the teachers as important ways of supporting their judgements, especially of those children who were not achieving as expected. This was seen as a value of each of the three assessments.

The nature of the assessments in *Lucid* Baseline and *PIPS* were seen by the children as a series of questions; in contrast, *Smart Cat Profiling* was much more closely allied to other learning activities children experience on the computer. As a result, they were seen by the children as 'games' which were 'really funny' and as the questions and activities were embedded within a meaningful context, it maintained the children's interest and motivation. The classroom management was made easier by the automatic sequencing of games that the program supports. The teachers were confident that the games maintained the children's interest and reflected the children's skills and abilities. Teachers were positive about the fact that they did not have to set aside time to work exclusively with each of the children. This relieves the significant time pressure that staff feel under to achieve 30 assessment sessions within a reasonable timeframe in using *PIPS* and *Lucid* Baseline.

Lucid Baseline Assessment requires the teacher to interpret the children's responses to the Communication element to reflect on their interest, description, vocabulary, grammar, phonological awareness and fluency in the context of answering questions about the story they have seen on the computer. This relies on teacher observation rather than on direct questions that have a right or wrong element.

Views of children

It is important to recognise that children enjoy having the exclusive interest of an adult. In both the use of *Lucid* and *PIPS* teachers commented on the fact that the children had enjoyed this exclusive attention. They also commented that the children did not see the tasks as stimulating of themselves – it was the adult attention that was important. In contrast, *Smart Cat Profiling* offers a consistent set of characters and a context for 'playing the game' that motivated the children to complete the tasks. The reinforcement of independence was also positive for the children, who were not aware that they were being assessed through the games' use.

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Reporting information

These three assessments offer very different forms of reporting data to teachers. *Lucid* and *Smart Cat Profiling* facilitate immediate reporting of the individual child. *Smart Cat Profiling* also feeds directly into the reporting process for the Foundation Stage Profile for each child. In addition, *Smart Cat Profiling* allows the data to be viewed for the whole class and has a measure of how that relates to National Standards: this analysis is very simple to review and the teacher felt that it allowed her to identify children who were not achieving as expected very efficiently. Analysis of the whole class can be achieved from *Lucid* if the individual data is collated in a spreadsheet.

Lucid and *Smart Cat Profiling* both offer information that can be presented to parents. *Lucid* provides a comprehensive written report which was felt to be rather wordy for some parents to access. *Smart Cat Profiling's* graph allows rapid assimilation and facilitated teacher/parent conversations about the child's achievements.

PIPS, in contrast, requires the data to be submitted to CEM in Durham for analysis and reporting back to the school. This usually happens within a few days, and results in a detailed report of the whole class of children which the teacher felt required significant time to interpret.

Conclusions

Effective assessment at the beginning of the child's school experience is a goal all schools share. The value of identifying those children who need extra help with classroom-based activities or are performing well above their expected levels of achievement are clearly understood. Managing objective assessment for children at this early stage in their education has been long sought after. These three tools offer contrasting models of assessment and use the practical support that ICT can give in very different ways. All provide data to support teacher's judgements. The new context-based approach offered by *Smart Cat Profiling* provides a serious challenge to the question-based formats of previous generations of assessments, and offers a classroom experience that teachers felt supported and enhanced the teaching and learning in the classroom.

TEEM
Contact name and title: Anne Sparrowhawk, Director
Email address: anne@sparrowhawkandheald.co.uk