



CEM 

AUTUMN 2014

CONNECT

RELAUNCH ISSUE 01

ASSESSMENT BEYOND
LEVELS
A CEM PERSPECTIVE

FEATURING

Evolution of Technology
in our schools

MidYIS
Your questions
answered

Case Study
International
Community
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**The new CEM
website**
Re-designed with you
in mind



Durham
University

A WARM WELCOME...

A warm welcome to this first edition of our reinvigorated, re-launched CEM Connect Newsletter.

For the first time our newsletter covers all educational phases and includes articles to give you just a taste of the wide-ranging activities we are involved in at CEM - from the assessment and monitoring systems that we have been trusted, and relied upon, to offer worldwide for over 30 years, to the research on which the assessments are based, to providing updates on all of our services and training opportunities. We will also be introducing you to the dedicated teams that help you make the most of your CEM assessments.

This first issue is released at such an exciting time for CEM. Our new-look website is now live, we have developed a firm and ever-increasing following on Twitter and we hosted a truly inspiring research conference in September which featured international educational experts, such as Professor John Hattie.

Our lead article focuses on the removal of National Curriculum Levels in England. The reality of Assessment Beyond Levels is that every teacher understands the attainment and progress that their individual pupils and classes are making: National Curriculum levels were simply used to provide a framework for recording and communicating that knowledge in a common language. We are confident that our colleagues in the classroom will manage this transition, as they do so many other changes, but we hope that this article presents some interesting solutions on how CEM systems can play a part in the evolution of effective practices for tracking progress and monitoring attainment in your school.

At the forefront of our minds is also the introduction of baseline testing in the reception year from September 2015. We welcome the Department for Education's call for the use of an objective assessment for children on entry to school. We feel strongly that this can add a hugely valuable perspective for classroom teachers on what your pupils know and can do when they embark on their educational journey.

We hope you find this revitalized **CEM Connect** interesting and we would love to hear your comments and ideas for future articles...or maybe you would like to contribute an article yourself?

Contact us at:
cem.newsletter@cem.dur.ac.uk

In the meantime we hope you enjoy this first edition!
Katharine Bailey
Director of Applied Research



CEM'S WEBSITE JUST GOT BETTER!

Here at CEM we want to make it as easy as possible for your school to keep up with the latest educational research, and to use assessment and monitoring to advance learning. We understand what busy places schools are and how precious everyone's time is.

Our new look website is here to help. Even if you only have ten minutes between meetings you can find what you're looking for. The website is

smart and simple allowing you to find the information you need quickly and effectively.

Whether you use a laptop, tablet or smartphone you can easily find your way around. The content has been streamlined to make navigation simple and stress-free, so you can find your way through the website – the innovative 'Get there Quickly' links allow you to do just that.

Our dedication to a consistently high-quality assessment and monitoring service, fantastic training and devotion to leading educational research and evaluation hasn't changed. Neither has our commitment to working closely with policymakers and third parties to positively influence education. We still deliver research-driven solutions; we have just made finding the answers a

little easier for you.

Our skilled team of in-house programmers and graphic designers have worked hard to make the new website innovative, informative and above all fun and easy to use.

So come and take a look:

www.cem.org



BASELINE ASSESSMENT IN RECEPTION

From September 2016 schools in England will be expected to demonstrate that 85% of their pupils reach an expected level of attainment by the end of Key Stage 2 in 2023, or to provide evidence of their pupils making expected progress given their developmental stage when they started school in Reception. They will be able to show evidence of progress by using one of a range of external systems that have been accredited by the DfE.

Is it right to assess children at the start of school?

A well-established baseline assessment, grounded in good research, provides education professionals with a range of reliable information to find out about each child's stage of development across a range of areas. The research is clear that some abilities are not measurable by observation alone. It is equally clear that observation is an important method of gauging other important skills and abilities.

We recommend using a combination of approaches to provide information to help teachers plan activities for children starting school. This includes asking questions and observing a child's behaviour. We also believe that the ongoing day-to-day informal assessment of children and classes lies at the heart of good education.

What position does CEM take on this policy development?

CEM strongly advocate the use of a baseline assessment and have been advising policymakers and politicians in this area for many years. A summary of our views on this policy can be found at: www.cem.org/blog/baseline-assessment

CEM have been providing assessments and analysis of pupils' progress for schools and educators in the early years sector for two decades. In 1994, CEM developed a baseline assessment for reception children (PIPS) with support from the NAHT and we have been publishing our research findings about children's early development since then.

Early years professionals in England, Scotland, Australia, Hong Kong, Germany, the Netherlands and the United Arab Emirates have chosen to use PIPS to help them understand the children in their care. Since 2004 over 3.6 million PIPS assessments have

been carried out by the profession. From the very beginning, the aim of the assessment has been to provide teachers with an independent and objective baseline to help them understand some of what children know and can do when they join Reception.

Children are presented with questions on a computer screen in a way that is fun and engaging. The baseline assesses their developing ability in a way that provides teachers with an objective indicator in a minimum amount of time.

Will CEM be an accredited provider of a baseline assessment?

CEM will be submitting a baseline scheme for the first round of accreditations in December 2014. The assessment will draw upon elements of the familiar PIPS Baseline but will feature some different content and reports, building on our own research and that of others. The scheme will be called BASE and will assess children's development in a number of areas including their interactions with others, feelings, dispositions, early mathematics, language and phonological awareness.

Some of the assessments involve teachers recording observations and some will involve teachers and children in one-to-one activities at a computer using software that adapts to the child's level.

From 2016, the Reception baseline assessments will be a key measure used to assess the progress of children on entry to Reception and it is recommended that schools take the opportunity to introduce Reception baseline assessments from next year onwards. The government will be announcing the accredited providers in January 2015.

Subject to accreditation CEM's BASE will be available to schools for use in September 2015.

To be notified of developments and to register your interest, please email us at: base@cem.dur.ac.uk



In June 2013 it was announced that National Curriculum levels for reporting attainment and progress would not be used in the new curriculum that has come into force for maintained schools since September 2014.



ASSESSMENT BEYOND LEVELS

A CEM PERSPECTIVE

18th November 2014
Radisson Blu Holloway
Circus Hotel,
Birmingham

**1 hour FREE
introductory session
into using MidYIS and
INSIGHT**

Book your place:
www.cem.org/events

According to the government, by removing levels, schools have been given the freedom to design a curriculum that guarantees pupils a rigorous and balanced education, using 'whatever measure they feel is most appropriate'. In other words, from this term onwards, they will be able to introduce their own approaches to formative and summative assessment, in order to support pupil attainment and progression.

So exactly which approach is the best?

The NAHT (National Association of Head Teachers) launched a commission on assessing without levels, and among their recommendations are that:

- All schools should have clear assessment principles and practices to which all staff are committed
- Pupils should be assessed against objective and agreed criteria rather than ranked against each other
- Pupil progress and achievement should be communicated in terms of descriptive profiles rather than condensed to numerical summaries, (although schools may wish to use numerical data for internal purposes)
- External moderation is essential

From the plethora of solutions being explored, CEM's suite of assessments certainly meets these recommendations, providing schools with the pathway to establish a systematic, rigorous and effective assessment framework.

PIPS Baseline (Start and End of Reception)

PIPS assesses children at the start and the end of Reception, providing two standardised national benchmark assessment scores, which schools can use to show progression across this stage.

InCAS (Years 1-6)

InCAS diagnostic assessments provide age-equivalent scores, and these scores can be compared across the years to track both individual and year group progress. Feedback from the assessments also includes remediation advice.

MidYIS (Years 7-9)

MidYIS assessments provide schools with a reliable standardised national benchmark for KS3. Feedback includes GCSE predictions and 'chances graphs' - per pupil, per subject, which are useful for pupils, teachers and parents. Progress towards these end-of-course predictions can be tracked in school against internal measures of performance in the subjects.

INSIGHT (Year 9)

INSIGHT assessments provide curriculum-related measures of Reading, Maths and Science at the end of Year 9, via standardised scores and/or curriculum levels.

Schools with pupils having previously taken MidYIS assessments will also receive progress measures from MidYIS to INSIGHT at the end of Year 9 in order to assess the value added across Key Stage 3.

Yellis (Years 10-11)

Similar to MidYIS, Yellis assessments provide schools with a reliable standardised national benchmark in KS4, providing schools with a clear vision of pupils' potential attainment. Progress towards predicted GCSE grades per pupil, per subject can be tracked in school against teachers' formative assessments.

Due to the personalised computer-adaptive nature of CEM assessments, they are equally suitable for EAL, SEN and G&T students.

While some schools have plans to develop their own assessment systems from scratch, many schools, in the immediate future, intend to continue reporting National Curriculum levels to parents and relevant stakeholders. For as long as schools are still requesting them, we will continue to provide them as part of our comprehensive feedback, in the form of:

- Chances Graphs for KS2 levels (PIPS and InCAS)
- Predictions, Chances Graphs and Value Added measures for KS3 levels (MidYIS)

Further Reading

- Assessing without levels
Department for Education
www.education.gov.uk
- NAHT Commission report
www.naht.org.uk
- A School Like Ours – Case Studies Using CEM systems in the absence of National Curriculum Levels
www.cem.org/levels



Rob's latest article on the smooth delivery of computer based assessments is available from the International Journal of e-Assessment at www.cem.org

EVOLUTION EVOLUTION EVOLUTION EVOLUTION

of technology in our schools

Rob Byatt is Technical Lead for eAssessment at CEM. He is interested in the efficient and effective use of technology in schools and in making the delivery of computer assessments as simple as possible whilst not compromising on their quality.

Ten years ago...

...when we used a computer, we almost certainly used a PC running Microsoft Windows, probably a desktop one. When we browsed the internet we used Internet Explorer, thoughtfully supplied to us by Microsoft.

Fast forward ten years...

...and there has been a huge proliferation of different devices, operating systems and browsers. What devices do you use in your school? Windows PC, Apple Mac, tablet, Chromebook, smartphone, a mixture of these or perhaps a hybrid device? (You may even be a fan of the phablet, whose sales are predicted to quadruple between now and 2017.) Which operating systems do your devices run? Windows no longer enjoys hegemony, with Android devices likely to be more numerous than Windows by 2016. Many schools have invested in Apple iPads and schools keen to show their forward-thinking outlook may have invested in Apple Macs. The choices for purchasers of technological hardware are dizzying with the added worry that what they do purchase may be obsolete before they are able to replace them.

But perhaps we should embrace the change...

...ICT is no longer a standalone skill carried out professionally by a 'techy' minority. Most of us, in our home lives, embrace

new technologies to some extent whether through the use of satellite TV, BBC iPlayer, internet shopping, email or use of social media. As has long been predicted technology is now intertwined with many aspects of our daily lives, and to our young people a life without technology is as alien as music cassette tapes, 3- channel television and no on-demand video streaming. Having a good mix of technologies in schools may be a pain to those who have to purchase and maintain them, but it is more reflective of life today – certainly more so than a suite of PCs locked in their own room. Similarly, at home we typically no longer store our computer in one room of the house which it never leaves.

At CEM we have...

...bought into the multi-device, multi-platform world. Our assessments for younger children can be run on Windows PCs, Macs or over the web. As soon as trialling to measure the equivalence of our assessments on tablets allows, we will be releasing these assessments to run on iPads and Android tablets. Our assessments for older children also run on the web and Windows PC and these will soon be available on Mac, with tablet versions to follow soon after. Being able to run CEM assessments in different modes and on different devices should help schools take advantage of the investments they have made purchasing new hardware and installing classroom Wi-Fi which helps to create a less formal setting for pupils sitting the assessments. To compliment this even further we are in the process of developing a new integrated website to better manage your assessments, pupil and results data.

The ever-changing nature of technology...

...creates challenges, but if schools, teachers and suppliers can embrace these changes today then we can give our children the best chance possible to cope with the technological changes still to come.

MidYIS

Your Questions Answered

The MidYIS computer-adaptive assessment is a single standardised assessment of developed ability for pupils aged 11 to 14. It is taken once a year, usually (but not exclusively) at the start of the school year, and provides schools with standardised scores, ability profiles and predicted subject exam results for their pupils.



What exactly are standardised assessments?

Standardised assessments allow the comparison of a pupil's results against others in the same year group who have taken the same assessment, forming a nationally representative sample. So basically standardised assessments are useful for identifying pupils' performance in comparison with other pupils throughout the whole country and relative to the national mean.

How does the MidYIS assessment ensure that pupils are given questions that match their ability?

The MidYIS assessments are computer-adaptive, meaning that they react to the answers that are being given by the pupil.

For example, if the pupil answers a question incorrectly the next few questions will be a little easier until the pupil can answer correctly again. When questions are answered correctly the difficulty will increase until they find it too difficult to answer any more. Essentially the questions adapt to the pupil's unique level of ability, meaning that each pupil sees a personalised assessment, challenging them at the appropriate level.

How can the results help me to understand my pupils' abilities?

The MidYIS assessment is made up of four separate sections: Vocabulary, Maths, Skills and Non-verbal. The MidYIS feedback gives a standardised score for each of the component parts allowing schools to look at the consistency of a pupil's performance in these different sections.

Additionally, an Individual Pupil Record Sheet is available for each pupil providing a visual representation of their result, with confidence measures (sometimes called error bars) displayed to show the statistical significance of a pupil's scores. (Figure 1)

Can the assessments help me to predict how well my pupils will do in the GCSE exams?

An important aspect of the feedback from MidYIS is the prediction of likely future performance. Using the standardised MidYIS scores the feedback provides a prediction in over 30 GCSE and KS3 subjects, for each individual pupil. These predictions are made by analysing the typical exam performance of similar ability pupils in that particular subject.

How accurate are these predictions?

We all know that for every pupil who achieves their expected/target grade there will be others who have done better or worse than expected. There is no such thing as an absolute certainty but MidYIS feedback includes 'chances graphs' for each individual pupil in each subject.

These show the most likely grade for pupils of each ability level as well as the chance (expressed as a percentage) of those pupils achieving a higher or lower grade. Some schools find this feedback useful to help decide pupils' subject choices when they choose their options for future courses and careers. They are also effective in discussion with parents about likely performance in examinations. (Figure 2)

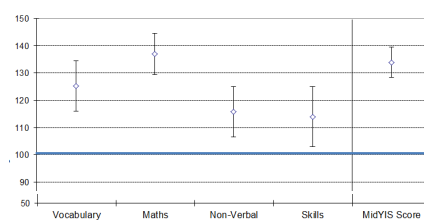
As a teacher, I know that no two cohorts are the same. Is it possible to recognize any trends in the ability of each cohort of pupils over a period of time?

MidYIS assessments produce feedback that can demonstrate the changing profile of the cohorts of pupils taking the assessments each year. The bar charts, and box and whisker charts, allow schools to instantly identify how the ability of the school's new intake may be changing over the years, which of course will have a bearing on future examination results and league table indicators. A changing intake profile can also be used to make decisions about funding and the need to assign resources to particular groups of pupils or interventions.

Figure 1

Using your IPRs to Inform Teaching and Learning

Pupil with High scores across all components



High ability pupil, unlikely to have achieved high scores by guessing alone

How can I use MidYIS assessments as a way to set targets and track progress as an alternative to National Curriculum levels?

Many schools find it useful to use MidYIS in Year 7 combined with CEM's INSIGHT curriculum-based assessment at the end of Year 9.

For example, schools might use MidYIS as a baseline assessment when pupils enter in Year 7 (as it is a standardised, national benchmark). They will receive predicted grades to aid with target-setting at GCSE and throughout KS3. The schools then assess the pupils again at the end of Year 9 using the INSIGHT assessment in order to get an independent and robust measurement of the progress made.

When the GCSE results are submitted to CEM, the school will be able to get a broad and evidence-based understanding of the progress made by individuals and of the cohort as a whole, across both KS3 and 4. Obviously, schools find that getting an understanding of each cohort's baseline

developed ability is powerful information and crucial in setting realistic and meaningful targets.

Read CEM's case studies 'A School Like Ours' to see how other schools are preparing for Assessment Beyond Levels: www.cem.org/levels

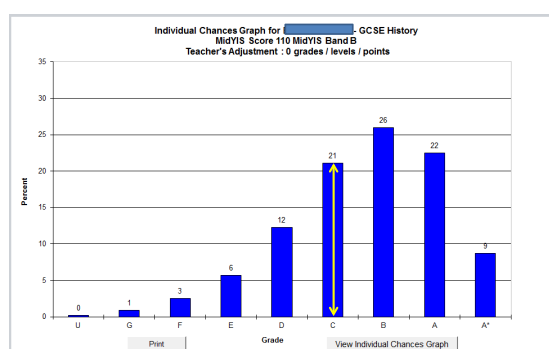
If you would like further information about how CEM's suite of assessment and monitoring systems can be used in your school as a framework for evidencing success, please contact us for a conversation to help you select the systems that meet your needs:

Email: levels@cem.dur.ac.uk

Tel +44 (0)191 334 4255

Figure 2

Predictions – Chances Graphs





CASE STUDY

AT THE INTERNATIONAL COMMUNITY SCHOOL, JORDAN

Our first CEM INSIGHT results have just arrived! The next step is making sure that they are used effectively. I have come across many schools which are 'data-rich' but where little use is made of it.

I first started using CEM assessments from Durham University in 1998 and since then have worked at, or with, schools in Europe, Latin America, Asia and the Middle East as a teacher, head teacher and CEM training provider. I took up the post of Head of Secondary at ICS Jordan in November 2013 and in addition to INSIGHT we also plan to use the MidYIS (Middle Years Information System) assessments with year 7, and ALIS (Advanced Level Information System) assessments with years 12 and 13 in September.

The International Community School is a long-established international school offering a British-style education where students take GCSE, IGCSE, AS and A-level examinations, as well as offering a range of BTEC vocational courses at levels 2 and 3. It is non-selective and inclusive, welcoming students from over 50 nationalities, including the local Jordanian population, which make up about 25% of the number on roll. Students may arrive at any time during the school year from a wide range of cultural and educational backgrounds and we need to establish very quickly what they know and can

do and how we can meet their needs by setting challenging but realistic targets. We have some testing as part of the admissions process but we hope to be able to work with CEM in developing this further.

So why use data?

I believe it is an important driver in school improvement planning. It rarely provides answers but it helps us to ask better questions. Strategies are based on evidence rather than simply perception, and evaluation can be tuned more finely. There are often some concerns that value-added analysis and staff room league tables can be used as sticks to beat teachers with but in my experience the data usually supports teachers' professional judgements and therefore builds confidence. There are many factors in schools which affect student outcomes in different subjects - timetable allocation, recent CPD as well as teacher effectiveness. The data allows fair comparison of results in subjects but it is up to schools to judge why the differences are there.



Sue Holt is Head of Secondary School at ICS, Jordan and has extensive experience in international education.

Sue has spent most of her career at the British School of Brussels where she held various posts including Deputy Head (Curriculum), Head of Secondary and Vice Principal, and finally as Acting Principal before moving to Argentina where she became the CEM's consultant for Latin America. Her work took her to Peru, Brazil, Chile and Argentina. She followed this by teaching and consultancy in Spain and China and returned to school leadership in Qatar.

Sue has twice been a speaker at the COBIS (Council of British International Schools) annual conference. She was also a speaker at the COBIS SMT conference in Madrid on using CEM data as the driving force in school improvement strategies and has been a presenter at CEM conferences in Hong Kong, Bahrain and London.

So how will we be using the data?

The first step for the SLT will be to look at the cohort data to get a picture of the year group. Cohorts vary, so year-on-year improvement in GCSE grades for example cannot be expected. In international schools in particular, when many students do not have English as a first language, vocabulary and reading scores are usually much lower than the maths and non-verbal scores. The graphs show a far greater percentage of students in the lower bands for 'literacy' and this is highly significant because good literacy skills are the key to gaining access to the curriculum.

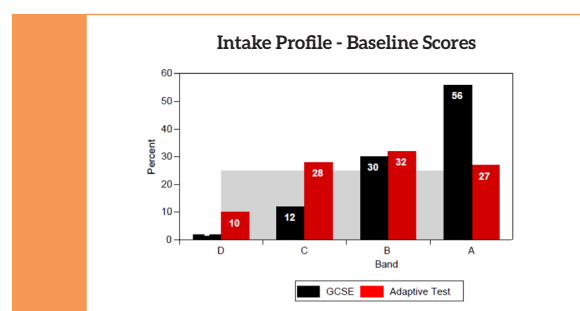
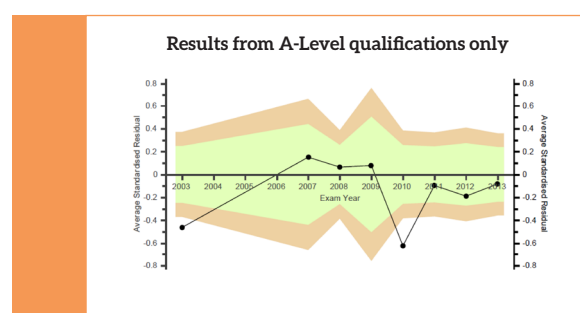
We have therefore modified the curriculum structure to allow more time for the teaching of English and have launched a major initiative in 'Literacy across the Curriculum'. We have appointed someone to lead this, share good practice in staff meetings and via the VLE, and expect to see explicit planning for it in schemes of work and lesson plans. A termly focus on specific skill areas is

proving to be motivational - a highlight of this summer term's focus on speaking and listening was a cross-curricular project resulting in the performance of a play charting the 60-year history of the school and involving every student in Year 9.

Everyone seems to think that this a very good idea but how will we know?

We shall track our cohort data year on year looking for improvement in 'literacy' scores compared to non-verbal and quantitative. Intensive EAL provision for new entrants with limited English is being planned to ensure that they will integrate more quickly.

The most important aspect we hope to see is the impact on students' learning, with a very individualised approach. Teachers will build the use of this data into their planning to meet individual needs and into the student tracking system. The profile of the student generated by the testing and the predictions, combined with the teacher's knowledge of the student's personal circumstances, will



be used to help set targets using the general guideline that: **CEM prediction plus challenge equals TARGET.**

For Year 9 this target-setting will be done in September when they embark on new courses. We hope that the use of the chances graphs will result in a learning conversation that will be motivational for teachers as well as their students, and raise expectations. It is often

difficult for comparisons to be made with other schools and it is fairer and more logical to judge a school based on the progress its students make.

In time we expect the data to give us hard evidence that students in ICS consistently make better progress than students of similar ability elsewhere! Follow us on our journey...

DATES FOR YOUR DIARY EVENTS CONFERENCES EXHIBITIONS

Discover how CEM can help you improve standards at your school. Learn how to get the most from CEM systems and learn from colleagues.

Come along to one of our regular events or come and meet us at an exhibition or conference. If you are in the UK you are welcome to come and visit CEM at Durham University.

For a full list visit www.cem.org/events

**OCT
2014**

10th
Newcastle Upon Tyne: Schools North East Conference

16th – 19th
Rome: IBO regional Conference

**NOV
2014**

6th – 7th
Cumbernauld: ADHS

7th – 10th
Bangkok: FOBISIA

11th
London: Dealing with Data - Yellis, plus Introduction to ALIS

12th
London: MidYIS, Yellis and ALIS

12th – 15th
Loch Lomond: SLS

13th
Durham: Dealing with Data, MidYIS, Yellis and ALIS

18th
Birmingham: Dealing with Data – MidYIS, plus Introduction to INSIGHT

19th
Birmingham: Dealing with Data - ALIS

2015

February
Muscat, Oman: BSME Annual Conference

March
Birmingham: Education Show

April
Brussels: ECIS Leadership Conference

May
London: COBIS Annual Conference

June
London: Basic users, MidYIS, Yellis and ALIS, plus Advanced users, MidYIS, Yellis and ALIS

COME AND SHARE YOUR EXPERTISE WITH CEM

PART-TIME AMBASSADORS NEEDED

As CEM's commitment to providing accessible training for educators, leaders and policymakers continues to grow, we are able to offer an exciting opportunity to join our team of INSET providers and events speakers.

The opportunity may suit teachers/leaders with experience of CEM systems and who are:

- excellent communicators
- enthusiastic
- available to commit to a minimum of 12 term-time days per year

To register your interest and to discuss this further please contact:

althea.towns@cem.dur.ac.uk Tel: +44 (0) 191 334 4240

Deadline by Monday 3rd November, 2014

TAKE PART IN CEM RESEARCH

FUEL POVERTY AND EDUCATION

We are looking for schools in North-East England, who are currently conducting PIPS Baseline assessments in KS1, to help us investigate how living in fuel poverty impacts on children's learning. The project will involve:

- The CEM research team distributing questionnaires to parents of KS1 children.
- A group of parents will also be asked to participate in a short telephone interview.
- Schools who are chosen to participate will receive a £50 Waterstones gift card.

If you are interested in taking part or would like further information on the project please contact:

lyn.robinson@cem.dur.ac.uk Tel: +44 (0) 191 334 4197

Deadline by Monday 1st December, 2014

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www.cem.org/blog