The 2019 e-Assessment Awards

The e-Assessment Association is an international not-for-profit membership organisation for everyone involved in, working with, using or developing technology to enhance assessment delivery. Together we aim to provide professional support, facilitate debate and discussion, communicate the positive contributions that technology makes to all forms of assessment and share news and good practice worldwide. Our Awards programme goes to the very heart of our core values.

However, when we agreed to put together an awards programme for the e-assessment industry back in 2016, we could only have dreamed to see the level of interest and diversity of entries that we have seen this year.

Our judges chose to select twenty-one projects as our 2019 Finalists, which is a significant accolade for each and every one of these entries. This brochure brings you a snapshot of all of these finalists in the hope that you will be inspired and delighted by the outstanding work taking place in this field.

Our 2019 finalists demonstrate innovation, in-depth research, transformational deployments and quality examples of the best use of both summative and formative assessment from across the educational spectrum.

Sincere thanks to all of our sponsors - PSI, who have supported this programme as our Headline Sponsor since its inception in 2016, as well as sustained support from ACER, AlphaPlus Consultancy, City & Guilds Group, Innovate Awarding, RM Results and SQA. I'd also like to thank our brand new sponsors for 2019 NCFE Cache and BTL, creators of Surpass, who together with our existing sponsors make it possible to run the awards.

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1. Innovation - sponsored by Innovate Awarding

Cognii with Cognii Virtual Learning Assistant

Cognii Virtual Learning Assistant(VLA) is a new genre of conversational EdTech product that combines the powers of conversational technology with the originality of conversational pedagogy. It is designed to improve the quality, affordability, and scale of education. Popular AI or Virtual assistant products such as the Siri on Apple devices or the Alexa on Amazon devices allow a user to ask a question in natural language and get an answer in natural language. They are however not optimized to teach a student about a particular topic in a way a teacher or a tutor would by engaging in an instructional and assessment focused conversation. Cognii VLA achieves this capability with the help of advanced Natural Language Processing (NLP) technology that provides automatic assessment of students' open- response answers, and guide them towards conceptual mastery with a personalized tutoring feedback.

Cognii VLA provides solutions to key challenges facing today's global education systems viz. the cost and time required by teachers to assess students' open-response answers and offering personalized tutoring feedback. During a multi-school and grade-level test, Cognii VLA was able to improve students' knowledge retention in Science subjects and teachers' productivity significantly while allowing schools' to scale high quality pedagogy.

International Well Control Forum (IWCF) with Easy as Pi, with a FORUM HUB

IWCF launched online assessments in December 2016 to their diverse membership base. With over 260 accredited training centres across the globe, centres in remote locations had difficulty transitioning to online assessments due to connectivity issues, meaning they couldn't experience the benefits on offer including instant marking, cost reductions, instant resits and results as well as increased flexibility.

To move to a truly paperless environment and improve the quality and delivery of assessments on a global scale, IWCF and eCom Scotland worked together to develop the HUB solution, giving training centres with connectivity issues the 'online' experience. The HUB was designed so that centres could be issued with a pre-programmed Raspberry Pi device which can be plugged in to download and upload assessments from a secure online link for use at their centres. Assessments are then automatically marked, with results issued to candidates once the scripts are uploaded back into the centre FORUM database.

Lexplore

Lexplore is a new reading attainment product for schools. Revolutionary AI based assessment can provide schools with a unique and analytical insight into reading. By monitoring a child's spontaneous eye movement Lexplore's precise machine learning models can pick up on minor differences in the way children's brains process text. They are then able to objectively determine a child's reading attainment across five key cognitive processes in a matter of minutes, and also pick up on specific eye movement correlations which quickly highlight children with difficulties, such as Dyslexia. The Lexplore portal offers a view on reading analytics like never seen before, we've all heard a child read, but have you seen a child read? First, an overview of reading across LA/MAT, whole school, class and by individual – it is here teachers can play back recordings of eye movements across the text whilst hearing the child read for deeper analysis, reading components such as speed, decoding and fluency can be broken down for further analysis with the ability to monitor progress over time.

NCFE CACHE with PregnancyVue by CACHE

Pregnancy Vue offers an immersive learning experience which allows the user to experience the stages of pregnancy from inside the womb. Designed in consultation with learners, tutors and subject specialists, the app offers schools and colleges an opportunity to reimagine how they can engage with learners and improve knowledge retention. The app has been developed so that it is accessible across devices from mobile to the latest Oculus headset. PregnancyVue includes a quiz mode so that learners can test themselves and identify gaps in their knowledge. Even better, the app is available for free for all CACHE customers.

2. Best Use of Formative Assessment - sponsored by NCFE Cache

Prime Principle Ltd with SIMPLE by Classroom Monitor

Classroom Monitor has been a market leading tool for teachers to record formative assessment, pupil portfolios and engage parents for over 14 years. It supports over 2,000 schools, 53,000 teachers and has approximately 1 million live pupils.
The company has spent the last 2 years investing in a new product that builds on the existing ethos of saving teachers' time and giving them access to insightful data for school improvement. SIMPLE was launched in January and represents a step-change for school data access. It allows teachers to record and evidence assessment against any criteria be they subject based learning objectives, soft skills and to cross reference those against external test data sources or contextual statutory data from a school's management

information system.

SIMPLE is the most powerful data tool for primary schools, is fully aligned to future Ofsted framework changes and is already saving teachers hours of time, providing parents with the tools to support their children at home and giving school leaders valuable insight into school performance.

The company is committed to supporting its existing school base and is in the process of migrating any schools that want to move from Classroom Monitor to SIMPLE free of charge.

Cognii with Cognii Virtual Learning Assistant

Cognii Virtual Learning Assistant(VLA) is a new genre of conversational EdTech product that combines the powers of conversational technology with the originality of conversational pedagogy to implement the most efficacious formative assessments at a scale. Compared to general purpose virtual assistants such as Siri or Alexa that only focus on answering a user's question, or 'essay graders' that focus on generating a number given an answer via brute-force modeling, Cognii VLA provides a unique solution with the help of advanced Natural Language Processing (NLP) technology that provides automatic assessment of students' open-response answers, and guide them towards conceptual mastery with a personalized tutoring conversation.

Cognii VLA provides solutions to key challenges facing today's global education systems viz. the cost and time required in assessment and tutoring by teachers. During a multi-school and grade-level test, Cognii VLA was able to improve students' knowledge retention in Science subjects and teachers' productivity significantly while allowing schools' to scale high quality pedagogy. Cognii VLA is being actively used by students across a number of K-12, higher education, and corporate training organizations.

Vretta with IntroMath

High first-year student drop-out rates have been an ongoing challenge for colleges across Canada. In 2004, the College Math Project was initiated by all colleges in Ontario to identify ways to improve student retention. Following 10 years of research, the results revealed that over one-third of first-year students were at risk of not completing their program due to their lack of foundational maths skills. This has led to a large gap in equity and attainment in mathematics, resulting in high drop-out rates.

Given this evidence, Vretta partnered with colleges to develop a unique assessment-for-learning platform called 'IntroMath' to transform the way students were being assessed. IntroMath initiates the student assessment through an upgrading assignment, which ensures that they have the necessary pre- requisite skills. This is followed by weekly cycles of interactive lessons and assessments to help them visualize, conceptualize, and engage with mathematics throughout the semester.

IntroMath has proven to reduce drop-out rates from 30% to below 10%. Numerous case studies have demonstrated that students of all ages and accommodations have benefitted immensely from IntroMath. Currently, IntroMath has been integrated for a wide variety of maths courses and is transforming the student e-assessment experience at over 70% of Canadian colleges.

3. Best Use of Summative Assessment - sponsored by SQA

Eindhoven University of Technology and Cirrus Assessment

The introduction of e-assessment by Eindhoven University of Technology (TU/e) came as a result of growing challenges around the authenticity and security of their paper based exams and demands from their students. The challenge TU/e was faced with was their focus on exact science courses. There were a number of solutions delivering support for digital testing with exact sciences (maths, physics, economy etc.), but none offering the security and robustness required for high-stakes assessments. TU/e needed to be 100% sure that the application was secure enough to withstand their tech-savvy students.

This submission details how the project was delivered and highlights how a holistic approach, with support for all those involved, has led to great results for learners, teachers, examiners, and TU/e.

It is a blueprint on how the introduction of technology for high stakes summative assessment can greatly strengthen the authenticity and validity of the exam. The use of parametrised auto-scored questions and a user-friendly but highly secure lockdown method on BYOD have provided tangible benefits to all involved. Close collaboration between TU/e, Cirrus Assessment, trainers and students coupled with detailed project planning ensure that all are now toasting its success.

Highfield Qualifications

Highfield Qualifications is a global leader in compliance and work-based learning qualifications and the 2018 Awarding Organisation of the Year. At Highfield we're committed to listening and responding to our customers, as well as being at the forefront of digital innovation. That's why we've developed Highfield Works - an innovative and user-friendly summative e-assessment platform for our regulated qualifications.

Highfield Works is now used for over 4,000 assessments each month, and makes life simple for learners, invigilators and our customers (including some of the UK's most recognisable companies) alike. We believe this browser-based solution stands out from the competition thanks to its innovative, user-friendly features, such as the function to give invigilators complete transparency of examinations and the ability for candidates to continue their examinations through to completion, even if a complete network failure occurs.

Our custom built and fully accessible system provides real time results for regulated qualifications and offers seamless integration with our existing system (Highfield Central) making customers' lives easier.

Qpercom with Qpercom Observe

We would like to nominate our digital clinical assessment solution, Qpercom Observe, for the Summative Assessment award. Qpercom spun-out from the College of Medicine, Nursing and Health Sciences in NUIG (National University of Galway) Ireland in 2008. Qpercom provides advanced assessment solutions to over 25 institutions worldwide, including Dundee University and the National University of Singapore. Our company mission is to advance global standards of assessment. Our solutions are developed from in-house research and development, and client collaborations with higher education institutions. Our core product, Observe, was developed to automate clinical assessments in medical education, to remove paper and increase quality standards. Every year, thousands of students perform OSCEs (Objective Structured Clinical Examinations), as part of their end of year exams. In one research study, an administrative error rate of 30% was discovered in exam correction. Automating exam delivery and cloud storage of data resulted in higher quality standards and zero correction time. More significantly, it facilitated psychometric analysis of exam data, such as, results, examiner participation, curriculum material, assessment forms, and overall exam performance. Observe is now used by healthcare education institutions worldwide to deliver high-stake clinical assessments.

TestWe

For organizations developing excellence in learning and assessments, TestWe delivers peace of mind because it's reassuringly secure! e-Exams are a priority for Education, not a side dish. That's why, at TestWe, we are proposing a new way to create, plan, grade and take exams all without using paper.
We propose a software for students that is secure, o ine and comfortable for students so that they can focus on their argumentation without the pressure of time. Most importantly, students can take their exams on their own device, that's the BYOD.
We developed a headache-free platform for faculty and professors, so they can create and grade copies on any device, adding as much multimedia content as they want. With our solution, institutions save up to 2,000 hours of work per year and up to 66% on operational costs. Stop wasting paper is also an environmental emergency to which TestWe answers.
Our constant search for feedback, self- improvement and our profound attachment to innovation brought us where we are today.
We work currently with K-12 and Higher Education institutions: universities, training centers, corporate universities...
TestWe is a complete e-Exam solution: an online platform for the administration and offline software for learners.

4. Excellence in Export - sponsored by City & Guilds Group

Laser Learning

Laser Learning provide e-portfolio assessment to CACHE centres throughout the UAE and worldwide.
"Laser have been a wonderful partner for us since we became a CACHE centre based in Dubai in August 2018. We have been able to work seamlessly together to ensure we are able to deliver a 'best in class' learning experience for all of our learners." - Charlotte Borghesi, General Manager, Kidz Inc Dubai
"Laser Learning is one of the most reliable companies I have ever dealt with. We are so happy to use their systems for all of our students. For a company that has students all over the middle east, my mind is at rest knowing that I can log in from my smart phone and check on any student or assessor." Samia Kazi, Arabian Child Dubai
"At CACHE we recognise the importance of embracing the opportunities technology provides for skills and education. We also understand the valuable role that high quality online learning plays in upskilling the care and education sector. This is why we are proud to endorse Laser Learning learning resources, identifying that these materials meet CACHE's exceptional standards for rigour and quality." Mike Potts, International Business Development Executive, CACHE

RM Results with Exporting e-marking to the Caribbean

The Caribbean Examinations Council (CXC) is a regional examining body that underwrites final certificates as the application and verification of a common standard across 19 islands in the Caribbean.

Over time, CXC had found its model of examiners travelling to central marking centres on four islands to mark exam scripts was becoming unsustainable. The ever increasing costs associated with the logistics of transporting and accommodating examiners to and from islands had introduced a significant risk to CXC's ability to administer examinations.

RM Results, a UK-based company specialising in providing e-assessment solutions to awarding organisations, met with CXC at the International Association for Educational Assessment (IAEA) conference in the Philippines in 2011.

RM Results introduced CXC to electronic marking (e-marking) software, the process of marking paper-based examination scripts by computer, as an enabler to improved efficiency and accuracy of the marking process.

Vretta with MathemaTIC

2015 marked the year when a highly prestigious international project to transform maths education at schools in Luxembourg was launched. The project was an international

undertaking by Canadian e- assessment organization, Vretta, in partnership with the Luxembourg and French National Ministries of Education, the University of Luxembourg, the Luxembourg Institute of Socio-economic Research, and the Luxembourg Centre for Educational Testing.

The export contract was initiated as a small-valued test project of an assessment-for-learning platform for a focus group of students to gauge its impact on students and teachers. The effectiveness and significant success of the platform, catapulted the project into a large-scale, multi-million dollar investment by the Luxembourg Ministry of Education spanning 4 years, and still ongoing, for the development and implementation of the platform for all school students across the country.

Throughout the project, Vretta has gained tremendous experience in managing stakeholders, overcoming challenges, and maintaining its reputation as the world's most innovative e-assessment organization that is revolutionizing maths education. The success of this export project has enabled Vretta to secure partnerships with academic institutions in France, USA, UK, Portugal, India, Armenia, and Australia while Vretta's development operations remain in its headquarters in Canada.

5. Best Transformational Project - sponsored by RM Results

iCapture Limited with Capture Education

Capture Education is a digital platform that is transforming the way that early years education providers are recording and tracking child progress while building strong parent engagement. Providers can send messages and request payments directly to parents reducing the effort spent tracking responses and chasing payments.
Our service encourages parents to submit evidence of development outside of the setting while keeping all information safe and secure. Through our parent app, parents can now share a video of their child achieving learning goals and feel more connected with their child's development. Providers can add these observations to their own record of evidence, maintaining detailed tracking of the child's development while reducing their teams workload. But it's not just about transforming engagement, we also make lives easier. On average Capture saves a nursery over 10 hours in paperwork every week. This gives practitioners more time with the children or time to complete CPD that they would otherwise not have time to do.

MyKnowledgeMap and Anglia Ruskin University

Anglia Ruskin University is the largest provider of nursing education in the East of England. With over 2,000 pre-registration student nurses and 5,000 mentors, the university has embarked on a complete transformation journey, innovating their approach to assessing students on placement, moving from paper to mobile, and dramatically enhancing the student and mentor experience.
With student nurses dispersed across 200 placement areas and three campuses, supporting students on placement with a paper-based assessment portfolio posed many challenges for the university. Students lacked the support they needed and Anglia Ruskin lacked insight into student progress, only receiving insight when mentors were able to visit students on placement. After a rigorous tender process, Anglia Ruskin University adopted Myprogress, an offline mobile assessment tool for assessing student on placement and over a three year period rolled out the technology across all three campuses.
Since adopting Myprogress, Anglia Ruskin have transformed the student and mentor experience, dramatically improved engagement and improved student feedback and feed-forward. In this time, the university has also reduced student attrition in their nursing programmes delivered in Cambridge from over 20% to 2.5% - a change that the project has positively contributed to.

SATs Companion

Since 2017, a team of teachers and headteachers, based in SW London, developed an

online system to cover the assessment challenges of the new KS2 and Year 6 SATs curriculum for English and Maths.

The system was designed, based on research, to identify the key challenges teachers, pupils and parents were facing for the KS2 SATs. The core issues we addressed were: lack of curriculum resources based on the new question styles, to reduce PPA time, provide effective GAP analysis with positive impact and value for money for schools during a budget crisis.

Our vision is for every Year 6 pupil to achieve and excel beyond the expected standard for Maths & English, to ensure they are Secondary school ready. Also, to reduce teacher workload and save school's money.

telc gGmbH with telc – language tests

Testing language skills of school leaving candidates is an important part of the recruitment process. Giving prospective employer accurate and useful information is difficult and to date, no test has sufficiently tested one of the most important skills, mediation, which is notoriously difficult to test via traditional paper and pencil methods. Through an innovative approach, this project has developed a new digital qualification, that not only gives test takers an opportunity to demonstrate a clear understanding of language use in the workplace, but also maps to the Common European Framework of Reference for Languages (CEFR). This is the only qualification to test language skills in a workplace context. Developed for the German market, it was clear from the start that traditional values and concerns towards the use of the internet in schools would be a significant factor in the programme's success. Despite this, and through a positive attitude to change and stakeholder engagement, this project has achieved a number of significant ' firsts' for the language testing community, including:

- the first with tasks specifically designed to demonstrate language ability in a workspace context
- the first to test language skills with workplace tools
- the first to fully integrate the new CEFR descriptors

The Federation for Industry Sector Skills & Standards with ACE360

ACE360 is the transformational project taken on by The Federation for Industry Sector Skills & Standards 3 years ago. After milestone changes in the Apprenticeship industry through policy and the transition from Frameworks to Standards, there was an urgent need to change our offering and the role we play in a commercial world. With our charitable intent at heart, we thought it important to offer a low-cost yet not sparing on quality product for the market – especially in light of our competitors charging up to £60,000 in annual licensing fees. We identified our calling in this new Apprenticeship landscape to provide an affordable and inclusive product for the whole industry whilst being sustainable for our Organisation. It is our very purpose that drove us to offer a cost effective product, accessible by all. Our sole purpose is to foster growth in the industry, which is why we believe our affordable product, inclusive to the whole Apprenticeship pipeline, is not only transformational but still very

centric to our core values and mission. This is especially true as our competitors' products are only within the grasp of the top Organisations, stifling industry growth and variety.

The EMA Programme, The University of Reading

The EMA Programme at the University of Reading is a complex, fast-paced transformational Programme working with almost all stakeholder types to deliver significant change in assessment practice. It is able to demonstrate evidenced benefits for both staff and students, particularly in terms of meeting student expectations and needs, enhancing feedback engagement and increasing learner satisfaction.

6. Best Research - sponsored by ACER

PSI Services with A Comparative Study of Online Remote Proctored versus Onsite Proctored High-Stakes Exams

Advances in technology have spurred innovations in secure assessment delivery. One such innovation, remote online proctoring, has become increasingly sophisticated and is gaining wider consideration for high-stakes testing, but many organisations still need convincing of its comparability to onsite proctoring. However, there is an absence of published research examining remote online proctoring and its effects on test scores and the examinee experience.

This paper describes a quasi-experimental field study carried out with three professional licensing examinations administered concurrently at different test sites that offered either onsite proctoring in testing centres or remote online proctoring in computer kiosks where the testing was proctored via Internet-connected video communication and surveillance. Results using both classical test theory and item response theory methods revealed substantial reliability and a strong degree of measurement equivalence across proctoring conditions. Candidates revealed slightly less positive reactions to some of the remote proctored testing conditions, but reactions were positive overall and had virtually no relation to test performance. Overall, the results of this study support the equivalence of kiosk-based remote online proctored exams and exams proctored onsite in test centres.