



THE IMPACT OF READ&WRITE ON LEARNER ACHIEVEMENT: AN EVALUATION STUDY

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1. Introduction

This is the full report of an independent evaluation of the literacy learning tool Read&Write. It has been prepared on behalf of Texthelp Ltd by Jim Playfoot and Lucy Clarke of White Loop Ltd, an education consultancy and research company.

Read&Write is Texthelp's flagship product and is currently used by millions of students, teachers and workforces globally. It comprises an easy to use toolbar aimed at making documents, files and web pages more accessible through its multiple functions. These functions include speech to text, text to speech, language checkers, picture dictionary and study skill tools. The product aims to provide an intuitive approach to support learners with a range of literacy tasks.

The adoption of learning technologies within a formal education setting is dependent on addressing a number of key questions in relation to that particular technology. This report – and the study it reflects - seeks to address these questions in order to provide an objective and unbiased analysis of the efficacy of Read&Write as a tool to support literacy progress amongst students in the first year of secondary school in the UK.

The study was undertaken across the full academic year 2017 to 2018 in order to gain a deeper understanding of how Read&Write is used amongst the selected user groups (both from a teacher and a student perspective) and to evaluate the impact on both learner progress and on motivation, engagement and approach to learning. The study incorporates the views and observations of teachers and other key staff on the implementation and efficacy of Read&Write in their schools alongside qualitative and quantitative data gathered directly from learners. Periodic data was generated across the year to track progress. This has been combined with feedback on learner engagement and motivation through a blend of surveying, observation and focus groups involving both learners and teachers.

The conclusions provide valuable feedback on the mechanisms by which literacy development can be supported by targeted interventions, and reflects on the way in which technology solutions are implemented within formal educational settings. Ultimately, the study offers a view on the value that Read&Write can bring to learners at what is a critical moment for their educational development.

2. Executive Summary

This independent study evaluates the impact on learner achievement in literacy through using the Read&Write support tool. The report presents the findings of a mixed method study to investigate the implementation and impact of Read&Write, and specifically its impact on reading, writing and comprehension, on learners aged 11-12 years within the first year of secondary school. Students at two schools were given access to Read&Write and evaluated using a mix of qualitative and quantitative methodologies. Alongside this, a further group of students in a third school was monitored using the same methodologies but without being given access to Read&Write.

The evaluation provided evidence of the overall positive impact of Read&Write on the exposed cohort. Analysis of the data and feedback generated across the year-long study indicated a number of key findings:

- Read&Write users showed a greater improvement in their average reading age than non Read&Write users
- The measurable quality of writing improved more amongst Read&Write users than non Read&Write users
- The degree of improvement in literacy achievement amongst learners at a lower starting point was better when those learners were given access to Read&Write
- In the context of recognised challenges that face this age group in terms of literacy progress in the first year of secondary education, Read&Write users achieved a significant degree of success compared to non Read&Write users
- Read&Write supported a majority of learners to develop better confidence in reading and writing and increased levels of engagement in – and enjoyment of - literacy tasks
- Measured both qualitatively and quantitatively, a structured and focused implementation of the Read&Write technology (based on regular use within a common environment) lead to a greater impact
- Teachers found that implementing Read&Write was valuable in terms of classroom management, they felt better supported and were freed up to spend more time teaching rather than correcting mistakes

The study incorporates qualitative and quantitative data gathered periodically from learners alongside the views and observations of teachers and other key staff with a focus on the implementation and efficacy of Read&Write in their schools.

The purpose of the study is to provide independent analysis of how effective Read&Write is in supporting literacy progress when used alongside other standard literacy interventions amongst this specific age group of learners. Progress has been monitored throughout the year with a particular focus given to reading level and comprehension, writing ability and, more generally, confidence and motivation in relation to literacy tasks.

The study also examines the impact on teachers, looking at a number of different criteria over the course of a school year. In order to do this, a blended evaluation approach utilising both

quantitative and qualitative methods has been used and the outcomes of the whole cohort analysed and interpreted to provide a number of key results.

The methodology will be described in more detail later, but, in brief, the learners' progress in both reading and writing was measured at four assessment points with an initial benchmark evaluation followed by three further assessments across the school year. Reading ability and progress was evaluated using a third-party online reading comprehension assessment, and writing levels were measured using a process based on a numerical assessment of the quality of a short piece of written work carried out by each learner at the four assessment points.

Alongside the assessment data, regular focus groups and interviews were undertaken over the year to gather qualitative information regarding the impact of Read&Write on motivation, engagement and enthusiasm amongst the learners. Observational feedback from teachers was also gathered relating to these areas. In addition feedback was gathered from participating teachers' relating to the impact of the implementation of Read&Write on their daily experience in the classroom and on their teaching practice.

The data gathered throughout the study clearly demonstrates a number of positive outcomes although, in some cases, it is not possible to attribute these outcomes solely to the use of Read&Write. We recognise that there will be some level of natural progression throughout the year and that other factors may play a part. However, the observational feedback from teachers taken alongside the qualitative analysis of student responses allied to the comparative data provided by learners who were not given access to Read&Write provides significant evidence to support the view that Read&Write offers specific, measurable and significant benefits to learners who use it on a regular basis. Furthermore, the benefits of Read&Write are most marked where implementation and usage form part of a structured and focused approach to technology. When set within the context of a typical fall-off or stalling of literacy progress amongst students in the first year of secondary school, the study concludes that Read&Write offers a valuable tool to support learners in improving their literacy.

3. Background

As learners start secondary school, they face a unique set of challenges. This is a time when many learners struggle and learning progress slows. At the core of each child's educational development lies the foundation blocks of reading and writing. Learners who face problems with their literacy skills and development at this age can suffer longer-term impacts that stay with them throughout their school career. Recognising this, the introduction (in England) of catch-up funding¹ for learners who have not achieved the expected levels in reading and writing at the end of primary school has been designed to encourage and support these learners by funding specific interventions. Although Read&Write is a literacy support that is aimed at providing support to learners of all ages and abilities (including adults within a professional setting), the focus of this study is those learners embarking on their secondary education journey.

The rationale and motivation for carrying out the study is threefold:

- To help schools understand how specific literacy interventions can have real impact on learners.
- To help Texthelp understand the needs of teachers and students in relation to literacy development at this crucial point in a child's educational progression.
- To contribute to the improvement of wider technology strategies within schools and to demonstrate what can be achieved when a clear strategy is in place.

About Texthelp

White Loop Ltd has undertaken this study on behalf of Texthelp. For over 20 years, Texthelp has been committed to enhancing education and raising literacy standards worldwide, with a particular focus on creating literacy and learning tools designed to support every learner in the classroom. Accessible across a wide range of platforms and devices, their literacy tools – including their flagship Read&Write product - have recently notched up their 16 millionth user. Texthelp works closely with the likes of Google, Microsoft, Apple, HP, Nuance, Adobe, Widgeit, Abbyy and Bookshare plus other leading developers. That means their tools are designed to integrate seamlessly with a wide range of other edtech-focused solutions and workflows.

About Read&Write

Read&Write is Texthelp's flagship product, used daily by millions of students, teachers and workforces globally. The discreet toolbar around which the product is based is designed to make documents, files and the web more accessible whilst building the confidence of young learners. It's conceived as a tool that can help students with a wide range of literacy tasks - from reading and understanding classroom materials to coursework and independent study. Read&Write is a great help for teachers in the modern classroom too, helping to cater lessons to a wide variety of learning styles so as teachers can concentrate on the most important aspect; teaching.

Read&Write supports struggling readers, gifted and talented pupils, EAL learners, those with individual needs and every student in between. The speech to text, text to speech, translate tool, language checkers, picture dictionary and study skills tools provide independence and create personalised learning opportunities for all.

¹ Year 7 Literacy Catch Up Premium available in England
<https://www.gov.uk/guidance/year-7-literacy-and-numeracy-catch-up-premium-guide-for-schools>

About the participants

The three participating schools were recruited in the summer of 2017 with two located in England and one in Scotland. Two of the three schools were new to Read&Write and this was their first year of using the product. Learners and teachers in these schools were given training in how to use Read&Write at the beginning of the autumn term. For the comparison school, the Year 7 students engaged in all the same assessment activities but were not exposed to Read&Write at all.

The profile of each school is detailed below, including details of size, catchment and some key points from the most recent Ofsted reports. Also set out is information about the students selected to participate in the study, along with information about how Read&Write was introduced to the schools and usage patterns across the cohorts.

Hartshill School, Nuneaton, Warwickshire

School Profile: Mixed Secondary School

Age range 11-16

Average sized (1,032 learners)

The proportion of learners from minority ethnic backgrounds is well below the national average.

The proportion of learners who have special educational needs and/or disabilities is broadly average.

The proportion of disadvantaged learners is higher than average.

Ofsted rating: Requires improvement (March 2017)

Hartshill School is a mixed secondary school in the Hartshill area of Nuneaton covering both a rural and urban catchment. It converted to Academy status in 2012 and now forms part of the Midlands Academy Trust, an organisation comprising four schools in the area.

The most recent Ofsted report for Hartshill in 2017 noted that overall the school requires improvement. The report found that that school was underperforming in a number of areas, and highlighted that disadvantaged learners were underachieving and that the gap between disadvantaged learners and their peers was widening. However the report pointed out that generally learners achieved well in English. Another noted strength of the school was that staff knew the learners well and as a result, the care for their personal development and wellbeing was good. Crucially, Ofsted noted that the newly appointed Principal, along with the senior leadership team, were clear about the areas for improvement and that they were taking prompt action to address shortcomings. Of particular note is the objective to utilise the Year 7 literacy and numeracy catch-up premium grant to fund several initiatives across the school, including the purchase of the Read&Write licence, hence their suitability to participate in the study.

The group of 18 learners selected to participate in the study were a mixture of boys and girls, all aged 11 or 12. All learners selected underachieved at the end of Key Stage 2 and were therefore eligible for the catch up premium. A small number of the cohort had Special Educational Needs.

Hartshill selected Read&Write as part of a multi faceted approach to help prioritise support for Year 7 learners eligible for the catch up premium with a view to promoting further usage throughout the school over time. Other initiatives in the strategy included some one-to one and small group support as well as a breakfast club for supported reading. From a practical perspective, all 18 learners were allocated a laptop at the beginning of the autumn term and had some initial training in how to use Read&Write. The intention was for all learners to collect their allocated laptop at the start of each school day and take it along to relevant lessons, returning it at the end of the day. The learners were told to use Read&Write on their laptops whenever they were asked to carry out an appropriate task in lesson time, such as writing or research. In conjunction with this, teachers across the school were advised of the introduction of Read&Write and asked to encourage and support usage in their lessons, as well as making lesson resources available to the learners through the school intranet. The learners could access computer facilities outside structured lesson time where they could Read&Write should they wish to, but, at the time the study was carried out, there was facility for learners to use Read&Write at home. It should be noted that research shows the importance of consolidating learning at home to show maximum impact at secondary school level². Texthelp do recommend and provide a home-based solution but at the time of the study this had not been made available at Hartshill.

Throughout the course of the study we engaged with all participating learners and also had discussions and engagements with the key staff involved; the Assistant Principal, the Head of Computing and a Teacher of English and Performing Arts.

Aberdeen Grammar School, Aberdeen

School Profile: Mixed Secondary School

Age range 11-18

Average sized (1,120 learners)

Wide range of social and cultural backgrounds, 20% of learners have EAL

HGIOS Level (How Good is Our School – Scottish self-assessment): Good

Aberdeen Grammar School is a six year comprehensive school serving the central and west-end area of Aberdeen which is primarily an urban catchment area. Although the school retains the name 'grammar' from its historic origins, it is not a selective school and has no special status. It is one of 12 schools funded by Aberdeen City Council.

Looking at some key information about the school from Education Scotland, there is a broad mix of cultural backgrounds, with around 20% having English as a second language. The proportion of learners claiming free school meals is relatively low at around 10%. And in terms of the learners requiring additional support needs, this applies to between 20-30% of Aberdeen Grammar learners.

From a wider perspective, in 2016 the Scottish Government consulted on the development of a digital learning and teaching strategy for Scotland. The resultant strategy set out a pathway towards

² *Should Schools set Homework?* Sharp, C., National Foundation for Educational Research 2002.

ensuring that all of Scotland's educators, learners and parents take full advantage of the opportunities offered by digital technology by establishing four guiding principles/missions:

- Develop the skills and confidence of educators in the appropriate and effective use of digital technology to support learning and teaching.
- Improve access to digital technology for all learners.
- Ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery.
- Empower leaders of change to drive innovation and investment in digital technology for teaching and learning.

In a partnership role - and fulfilling their remit as a local authority - Aberdeen City Council established TASSCC (Technological Assessment and Support Service for Children and the Curriculum) to provide a technology support service delivered through staff training and the provision of resources. This strategy encompassed the roll out of Read&Write to all schools in the area including Aberdeen Grammar and as such the school was able to participate in the study.

26 learners aged 11 and 12 were selected to take part in the study under the guidance of their English Teacher and Support for Learning Coordinator, and with the broader support of the technology strategy implemented at the school and encouraged by the local authority. The cohort were of mixed ability and included a small number of learners with special educational needs. From a practical perspective, the learners usage of Read&Write was focused around their English lessons during which they had full and continuous access to computer facilities. Learners did not have access to laptops so time spent using Read&Write was either during English lessons or outside of structured lesson time when they could access other computer facilities at school. During the course of the study the learners did not have access to Read&Write at home.

Over the year, as well as marking progress at the assessment points, we regularly engaged with all the students through focus groups and interviews and also with the key members of staff involved in implementing and using Read&Write.

The Nuneaton Academy, Nuneaton, Warwickshire

School Profile: Mixed Secondary School

Age range 11-16

Smaller than average sized (574 learners)

The proportion of learners who are disadvantaged is above average.

Ofsted rating: Requires improvement (October 2017)

The Nuneaton Academy is a small mixed secondary school in the town of Nuneaton, and is one of four schools in the Midlands Academy Trust. The majority of learners are white British and the proportion of learners who are disadvantaged is above average.

The Ofsted report in September 2017 noted that Nuneaton Academy requires improvement. In the past, the school suffered with low levels of achievement and weak progress from Year 7 to Year 11 compared other similar schools. However, the 2017 Ofsted report noted that there had been a change in leadership earlier in the year and pointed to improvements in attendance and academic standards. Also highlighted was a positive and cohesive school community along with a changes in the school curriculum and full complement of specialist staff, resulting in a better pace of improvement across the school.

The group of 17 learners selected to participate in the study were a mixture of boys and girls, all aged 11 or 12. All participating learners had underachieved at the end of Key Stage 2 and were therefore eligible for the catch up premium. A number of the cohort had special educational needs. All of the learners taking part in the study had access to a widely used reading intervention, one that monitors progress rather than provides direct support. Readers take short comprehension tests once they finish reading a book to help select appropriate follow up books and encourage progress.

The cohort at Nuneaton Academy represent the comparison school in the study and therefore had no access to Read&Write over the course of the year. All the participating learners were assessed at the same four points during the year as learners in the other two participating schools and we engaged all participating learners in interviews and focus groups.

Summary of Participants

- 3 secondary schools
- 61 learners aged 11-12
- 10 teachers and staff from the SLT

Literacy and Trends at age 11-12

As learners start secondary school, they face a unique set of challenges. This is a time when many learners struggle and learning progress often slows. At the core of each child's educational development lies the foundation blocks of reading and writing. Learners who face problems with their literacy level and development at this age can suffer longer-term impacts that stay with them throughout their school career. Recognising this, the introduction (in England) of catch-up funding for learners who have not achieved the expected levels in reading and writing at the end of primary school has been designed to encourage and support these learners by providing funds for interventions and extra support. Although Read&Write is a literacy intervention that is aimed at providing support to learners of all ages and abilities (including adults within a professional setting), the focus of this study is those learners embarking on their secondary education journey.

With our focus on the 11-12 year old group, an age when learners are transitioning from primary to secondary school, it is important to appreciate the context at this point in the progression of learning in order to fully understand the outcomes of the study and the implications for efficacy and uptake. The first year of secondary school is a period of change for young people with many challenges and obstacles both within the school environment and beyond. It is important to recognise the significance of these influences on all learners of this age when analysing our findings.

The transition from primary to secondary school is a major life experience for learners. As well as being a time of widening horizons and growing independence it can also be a time when their confidence as learners can be challenged and learners can fail to progress as expected. The challenging nature of this period in a child's educational development is widely recognised by teachers, and many secondary schools engage in a range of activities and initiatives to support and guide learners through the change (including transition visits and summer schools).

The tenth annual What Kids Are Reading Report³, which analysed the reading habits of almost one million school learners from 4,364 schools, revealed that reading progress made by learners in primary school halts when they transfer to secondary school and found that there is a problem encouraging secondary school learners to read challenging and age-appropriate books.

The majority of primary schools place an emphasis on developing learners' literacy skills, but with the immense pressure to ensure the curriculum meets a range of competing needs, this focus can become lost amidst the transition to secondary school. Sociological and biological factors also play a part, and many young learners struggle to maintain reading habits as their attention wanders and their learning diversifies during the early months secondary school.

A UK government report⁴ shone a light on the progress level of learners through primary and secondary education highlighting some relevant factors for our study. The report stated that, in general, more progress is made across reading, writing and maths in Key Stage 2 (7-11 years old)

³ *What Kids Are Reading: The Book-Reading Habits of Pupils in British and Irish Schools 2018*

A summary of the findings of an independent study by Professor Keith Topping
Professor of Educational and Social Research, School of Education, University of Dundee.

⁴ *How do pupils progress during key stages 2 and 3?* Department of Education 2011

than in Key Stage 3 (11- 14 years old). Perhaps most pertinent was the finding that the first year of secondary school - the year of our study cohort - sees the average literacy progress at its lowest level in terms of reading, with similar results for writing (lowest progress for writing was in year 8, but second lowest was Year 7). Whatever the reason for this, it's clear that the first year of secondary school is a time when reading and writing progress comes under significant pressure and can, in fact, go into decline. And all this at a time when the skills of literacy – which sit at the cornerstone of learning – are most needed.

The same report analysed average levels of achievement for KS2 and KS3 learners and found that, for reading and writing, the progress made during primary school significantly slowed down following the transition to Year 7. The often healthy progress made towards the end of Year 6 - possibly influenced by short term gains in the run up to SATs - is not sustained through the transition from primary to secondary school and falls away during Year 7.

UK government policy has developed in light of these challenges and in recent years the literacy catch-up premium has been introduced. This gives schools in England and Wales additional funding to support Year 7 learners who did not achieve the required level in reading at the end of primary school. Schools currently receive £500 for each pupil that fits the criteria. They must then report on how the money was spent, as well as the impact of the premium to those learners.

These issues provide a challenging context for our study. Existing evidence paints a picture of standards of reading and writing amongst 11 and 12 year olds plateauing. Against this backdrop, literacy support tools and approaches are critical to helping overcome the obstacles that many learners face at this age. This needs to be taken into account when analysing our results and considering any progress made in reading and writing of the Read&Write learners – *any* progress is positive but progress within a context of the recognised fall-off of achievement in Year 7 should be considered even more striking.

The focus on the importance of literacy across all age groups is based on the understanding that reading and writing provide the backbone to learning across all subjects. Progress in either reading or writing will mutually beneficial in the long term, and learners will reap rewards across all learning as they progress through school. Increased confidence in the area of reading and writing will bear fruit not only in literacy tasks but across the curriculum in general, providing sound footings for whatever education and career paths are chosen. Of course, if students' confidence levels can also increase then this will naturally reap benefits in other areas - academically, but also in their personal development.

At a key time in learners' progression through school, when significant changes are happening, and with learners taking on more subjects and broadening their learning horizons, reading and writing are at the core.

4. Objectives and Methodology

This study aimed to address the value and impact of Read&Write on a representative sample of learners in the first year of secondary education. The study is based on gathering qualitative and quantitative data relating to a range of metrics periodically over the course of a single academic year. The profile of the schools involved in the study is set out in the previous section.

The main objectives of the study were:

- to generate data relating to the impact of Read&Write on literacy achievement, learner motivation and teacher experience
- to analyse the data and evaluate the extent to which Read&Write improves language and literacy skills for students who use the product over a set period of time
- to provide qualitative analysis that evaluates the impact on student engagement and motivation alongside any improvements in literacy
- to provide qualitative analysis that evaluates the impact of the use of Read&Write on teachers and teaching staff (in terms of their practice and the degree to which such a product can help to promote learning within the classroom as a whole)
- to examine how schools approach the implementation and usage of Read&Write and identify any specific barriers to the effective adoption and roll-out of such a technology

Research Questions

Our approach to the study centred around a number of key research questions:

- What is the impact of Read&Write on the development of reading and writing skills for 11-12 year old learners over the course of a single academic year?
- Beyond academic performance, are there other benefits to learners who use Read&Write?
- How does the progression of learners using Read&Write compare to similar aged learners who do not have access to this technology?
- How do schools use Read&Write during their first year of usage and are there any barriers to the impact that can be achieved?
- What is the impact of using Read&Write on teaching practice and classroom management?

Methodology

To evaluate the efficacy of Read&Write on the learner groups a blend of qualitative and quantitative methods was used in order to learn as much as possible about the user experience and impact. Regular interaction with learners and teachers combined with the numerical data gathered over the year enabled us to create a complete picture of academic progress alongside learner and teacher experience for three individual schools, all with different profiles (outlined previously).

The approach taken was to engage with two schools who were implementing Read&Write for the first time and compare the progression of learners at those schools with a third school that had no exposure to Read&Write and was using alternative (non-technology-based) support tools for learners in the first year of secondary school. The comparisons drawn are simply on this basis and in the context of the challenges faced by all learners at this particular age, and not focused on the specific standard of achievement.

Reading Assessment

The impact of the use of Read&Write on reading comprehension was measured using a literacy assessment tool called Literacy Online (www.literacyassessment.co.uk). This is a widely used online tool that has been developed as a way for schools to monitor student progress against literacy (comprehension) over time. The tool offered us an ideal means of evaluation for the study as new comprehension questions are generated each time a pupil logs in to take a test (ensuring no questions are repeated), and individual and group results are mapped over a period of time.

When taking the test students answered a number of multiple choice questions aimed at evaluating their reading comprehension skills with the outcomes given in terms of a standardised reading age. This literacy assessment system measures and tracks each learner's progress and enables the results to be analysed in terms of reading age compared to real age (or the reading age of peers), and the gradient of improvement for each individual learner. It is this gradient of improvement that we are most interested in.

The simplicity of the approach of Literacy Online means that a learner can complete a short test during the course of the school day. All learners sat the assessment under the same conditions and there was no time limit for answering questions (although most learners completed within 15 minutes).

Writing Assessment

In order to benchmark and measure the standard of writing for the study, an assessment tool called WriQ was used. WriQ is a product developed by Texthelp that uses an algorithm to provide data for assessing the quality and accuracy of a student's writing. When a piece of written work is appraised by WriQ the result is an assessment of a number of metrics including sentence length, text maturity, spelling accuracy, punctuation correctness, grammar correctness and correct word sequences. The results of a WriQ analysis are shown as a blended numeric score. As with the reading assessment, this enabled us to provide a baseline level for each learner and chart progress at each of the touchpoints across the academic year.

At each assessment point, learners were asked to work on their own to produce a piece of written work of around 200 words. They were given a choice of tasks based around either a creative piece of writing or reporting back on something that had happened to them recently. For the purposes of the assessment learners could either hand write or produce a document on the computer, although no aides for spelling or grammar were available in either case.

Whilst we recognise that WriQ is a Texthelp product, it should be noted that use of WriQ was entirely anonymised and that the measures and metrics gathered here were submitted directly to the WriQ system with results automatically generated. The system cannot recognise the use of Read&Write so in our opinion offers an impartial measure and set of metrics in relation to writing progress.

Both the reading and writing assessments were undertaken at four points during the school year; at the start of the autumn term, after the first term, after the second term and at the end of the summer term. The key point here is that the baseline data was recorded prior to any exposure to Read&Write thereby providing a neutral start point for all learners, enabling clear comparisons to be drawn on a range of criteria between Read&Write users and non-Read&Write users.

Motivation Survey

At the beginning of the study, all learners took a short online multiple-choice questionnaire with questions based around their level of engagement and motivation with learning and school activities. The survey was designed to benchmark each learner's initial attitude and feelings towards different reading and writing activities, as well as his or her general confidence and enthusiasm for learning. The results of the initial motivation survey were recorded and all learners then completed the same questionnaire at the end of the academic year with results compared across the two sets of data.

Learner focus groups and interviews

The qualitative element of the study was underpinned by regular interaction with the participating learners. Individual interviews with a selected number of learners at each school were carried out at four points during the year to provide a forum for learner feedback and to give a continuity of evidence to support teacher observations in terms of individual learner development. Alongside this, focus groups of between 4-7 learners were conducted at the same four points during the year to engage with learners within the context of their peer group, garner opinion and promote discussion about Read&Write and general progress in terms of literacy.

In both the interviews and group discussions, learners were encouraged to talk freely about their feelings towards school, learning, the change from primary to secondary school, their feelings about learning with technology and their attitude to different types of learning. An important element of the discussions was to explore their reading habits, what they liked/disliked about reading and to explore their writing habits, and how they felt about writing. This discussion took place within a wider context of how reading and writing related to their interaction with technology. More specifically learners were encouraged to talk about their use of Read&Write within the classroom, whether they could see any benefit to using it elsewhere, their favourite functions, and whether they would like to continue using it in the future.

Both the interviews and focus groups enabled us to evaluate some of our research questions from different perspectives. With individual interviews we were able to draw out more personal experiences and encourage students to give more detail on matters they may not have wanted to share in a group situation. The focus groups were very useful as a way of garnering general consensus on certain aspects of school life and learning, as well as allowing us to observe how learners developed some of their skills over the year and how their use of Read&Write might be affected by social, environmental or practical factors (like access to technology or the stigma that might be associated with using such a technology).

Teacher interviews

It was also vital that the results of the study were sufficiently informed by the inputs, observations and experiences of participating members of staff at each school. Their feedback and commentary provided significant insight into the impact on learner progress, learner motivation and the approach to learning and classroom conduct. In addition, teacher feedback provided us with a series of personal impressions of Read&Write as an assistive technology tool, and gave us perspectives on the effect such a tool can have on teaching experience and teaching practice.

The teacher interviews were conducted throughout the year at roughly the same points as the learner assessments.

Summary of Methodology

- Reading Assessments at four intervals
- Writing Assessments at four intervals
- Motivation Survey at the beginning and end of the year
- Learner focus groups
- Learner interviews
- Teacher interviews

5. Key Results

Summary

The evaluation provided evidence of the overall positive impact of Read&Write on learners aged 11-12 in relation to the central aims of the tool which are to improve literacy levels amongst learners who use it regularly. The study also indicated that Read&Write had a positive effect on learners' engagement and motivation in relation to their reading and writing in school. The most important and statistically significant findings are outlined below. These headline findings are expanded on in the subsequent reporting sections (which are divided into specific areas relating to reading achievement, writing achievement, motivation/engagement/confidence and teacher experience).

Key findings are as follows:

ON READING:

- A greater proportion of Read&Write users (66%) improved their reading age over the year compared to the non Read&Write users (27%).
- The average reading age of Read&Write users increased by 1 year over the study period, compared to the a fall of 0.5 years for the non Read&Write users.
- The biggest improvement in average reading age across the evaluated cohort was 1.2 years at the school where the implementation of Read&Write formed part of a wider technology strategy.

ON WRITING:

- The measurable quality, accuracy and scope of the written work of Read&Write learners improved by 3.5% over the year compared to a fall off of -1.5% for non-Read&Write learners.
- The biggest leap in writing assessment scores for the Read&Write groups (+6%) was at the school where the use of Read&Write had an intensive focus on written task-based learning.
- Looking at the lower achievement group within each school, over the course of the study, the Read&Write users saw an average increase in their writing scores of 13.7% compared to 4.2% for the non Read&Write users suggesting that Read&Write has a greater impact on learners who most need help.
- Amongst the lower achievement group, the biggest leap in writing assessment scores (20.8%) was at the school where Read&Write was used for written work in a focused and task-based way.

FROM THE TEACHER EXPERIENCE:

- Both teachers and learners reported that Read&Write benefited learners' levels of confidence in relation to their reading and writing and engagement in a variety of literacy tasks.
- A number of participating teachers reported that Read&Write helped them to create time and space within the classroom, allowing them to give a greater level of support to learners who needed it.
- A number of participating teachers reported that Read&Write freed them up and enabled them to focus more on learning rather than on correcting mistakes – Read&Write creates time rather than takes time.
- Qualitative analysis suggests that Read&Write enables teachers to be more flexible in how they manage the classroom; they are able to complement other support for learners with literacy challenges.
- Read&Write can contribute to a calm and productive learning environment as it engages learners in a positive way, gives them a focus for their learning and enables them to be self-starting within the classroom context.

Our key findings point to the positive impact of Read&Write in the classroom. Beneath this is an understanding that a more robust and supported approach to implementation of the tool reaped the greatest rewards. Usage of Read&Write is key to its usefulness; the amount of time spent and the way in which the tool is used both contribute significantly to the impact the tool can have. The two participating schools that used Read&Write took very different approaches to implementation with one school (Aberdeen Grammar) establishing regular touchpoints for the use of the tool and focusing use on specific and repeated tasks. The other school (Hartshill) established a process whereby learners were themselves responsible for collecting laptops from a central location at specific times and were then able to select the particular lessons where they used Read&Write. Our evidence suggests that although a self-directed approach has benefits, the lack of engagement by some teachers allied to practical problems around the collection and storage of laptops significantly hindered the level of usage amongst certain Hartshill learners. In our view this somewhat inconsistent approach to the implementation and usage of Read&Write is reflected in the lower level of achievement amongst Hartshill learners compared to those at Aberdeen Grammar (although Hartshill learners still outperformed those from the non-Read&Write school).

The participating Read&Write schools were using the tool for the first time in the year of the study. Consequently part of their experience included the implementation and dissemination of Read&Write amongst inexperienced users, both learners and teachers. Although this has not adversely affected the validity or overall outcomes of the study, it means that the initial stages of adoption, particularly in one of the schools, presented some challenges. Where access to technology was more difficult or inconvenient, the initial stages of integration of Read&Write were more challenging and measures were taken to overcome this as the year progressed.

In addition, our study was limited to the usage of Read&Write within the grounds of the participating schools and although learners were able to access computer facilities in their spare time (outside of formal learning sessions), they did not have access to Read&Write at home. Had both schools been more established users of Read&Write then their usage patterns may have differed with the tool being made available to learners to use for homework and other computer-based learning at home.

Taking into account some of the limitations and variations in usage, the results of the study are nevertheless significant and positive. As part of a coordinated and well-supported technology strategy, Read&Write can complement other literacy support methods to improve progress in reading and writing for 11-12 year olds, it can encourage greater confidence and motivation amongst learners who use it regularly, and it can support teachers in developing literacy amongst all learners at this critical age in their development.

On the following pages, we go into greater detail regarding the findings of the study and the specific outcomes in relation to reading, writing, learner motivation and teacher experience.

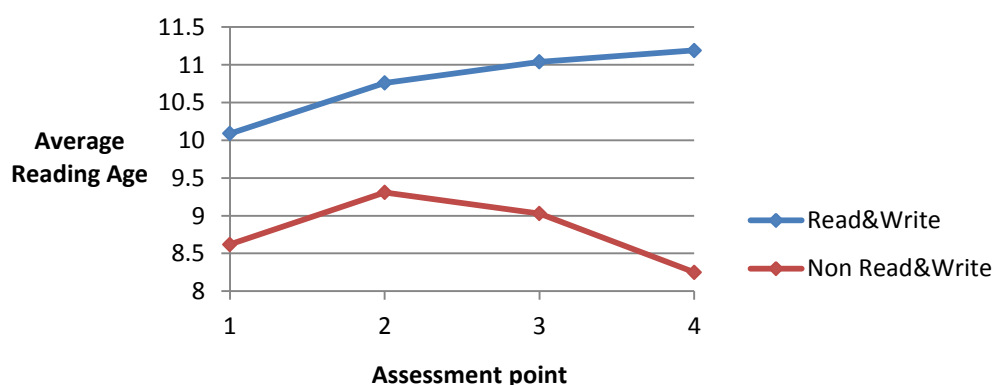
Specific Results Relating to Impact on Reading

Looking first at whether learners' reading ages improved over the year, we can see that Read&Write users performed better than those who had no access to Read & Write. Our analysis indicated that more Read&Write learners saw an improvement in their reading age than those who did not use Read&Write. **66% of Read&Write learners improved their reading age, compared to just 27% of non-Read&Write learners.**

If we look more closely at the results for Read&Write users, we see that the majority of learners at both schools improved their reading age over the year - the breakdown between the two schools being 72% at Aberdeen Grammar and 56% at Hartshill. Aberdeen Grammar shows the highest number of learners with an increase in their reading age.

These results give a good indication of the successful impact of Read&Write. If we then look at the average reading age of each group, the results are also encouraging. Focusing on the improvement in the average reading age from the start point to the end of the year, **for the Read&Write cohort there is an improvement of 1.0 year in the group's average reading age, whereas the non-Read&Write school sees a drop off in the average reading age of the group of 0.5 year (Fig.1).**

Fig.1 Comparison of Average Reading Ages of Read&Write Users and Non Read&Write Users

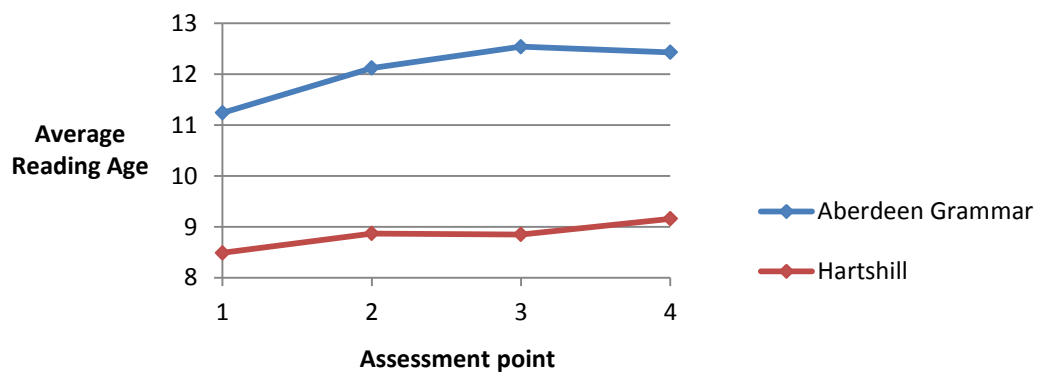


In the context of expectations at age 11-12 - when learners can struggle to maintain or improve on their reading ages - the difference between the different learner groups is clear. The non-Read&Write learners are falling short of where they would hope to be which is not entirely uncharacteristic of learners at this age, but the learners using Read&Write show a steady increase in reading age over the period.

When looking more closely at the two schools using Read&Write (Fig.2), the data shows that both schools improved over the year. We are not focusing here on the actual starting points of the two groups but more interested in how the learners develop over time. The gradual increase in average reading ages is already encouraging given the challenges faced by this age group, where achievement can level off or decrease. The comparison between these two schools is not to be made in terms of the levels of achievement, as the groups start quite far apart on this criteria, but rather in the difference between the starting point and finishing point. **The incline over the year is**

positive for both, with Aberdeen Grammar showing a reading age improvement of 1.2 years and Hartshill of 0.7 years.

Fig.2 Comparison of Average Reading Ages of two groups of Read&Write Users

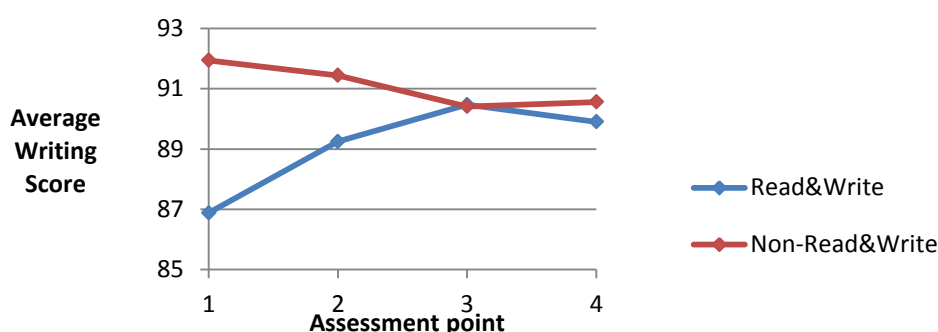


Although both schools performed better than the non-Read&Write school, Aberdeen Grammar specifically showed better results in terms of learner progress. Comparing these two groups requires us to understand better the reason for the higher rate of improvement at Aberdeen. It's important to note here the difference in approach and in the integration of Read&Write of the two schools as this may account for such an outcome - at Aberdeen Read&Write formed part of a wider technology strategy adopted by the school and local authority. The usage patterns at Aberdeen were more focused and intensive, as opposed to the more general, self-guided adoption at Hartshill (where learners were left to self-manage their usage and were given less direct support). This suggests a more structured and guided approach will increase impact in terms of reader progress.

Specific Results Relating to Impact on Writing

Taking a similar approach to the analysis of the results from the writing assessments (Fig. 3) gives further evidence of the positive impact of Read&Write (but with some interesting distinctions). Again, the starting level of each group is less important than the change that occurs over the year. Plotting the line of the numerical average scores for the comparison groups, the upward trend of the Read&Write users is contrasting to the downward line of the non-Read&Write users. **The data shows that the improvement in writing scores of the Read&Write learners was positive overall with a percentage increase of 3.5% over the academic year, compared to a fall off of -1.5% in the writing scores for the learners for the non-Read&Write school.**

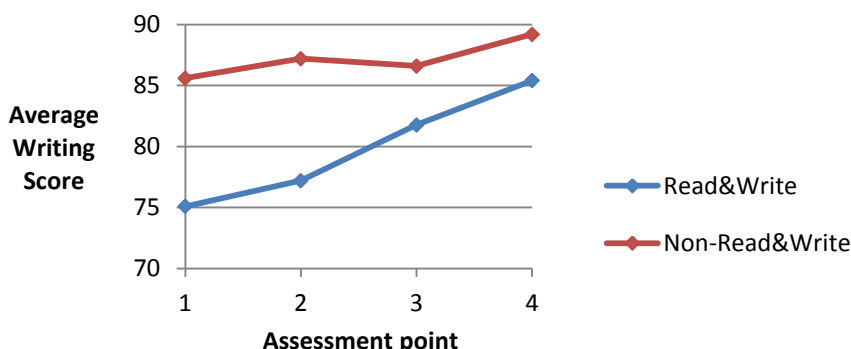
Fig.3 Comparison of writing assessment scores of Read&Write Users and non-Read&Write Users



In Fig 3 above, the averages of the two Read&Write schools are combined in the blue line. However, there is a distinction to be made between the two Read&Write schools as the improvement across both is not consistent. In fact Hartshill sees a slight decline in writing achievement over the year (-0.9%) and although this is a much less significant decrease than for the non-Read&Write school (-1.5%) a discrepancy does exist. Hartshill does well in the reading assessments but not so well with writing - there may be a number of reasons for this. The achievement of the Aberdeen group to show an improvement of +6% over the year in writing scores is the most significant in the overall cohort, indicating a marked development in writing skills according to the various metrics applied. This may not be surprising given the task-orientated usage that the Aberdeen learners benefited from and the greater focus on using Read&Write explicitly as a tool for writing. Where Hartshill took a more general approach to using Read&Write in lessons, at Aberdeen Grammar some lessons were entirely based around writing tasks focusing on various functions and an intensive use of Read&Write. This suggests that such an approach encourages greater improvements in writing skills.

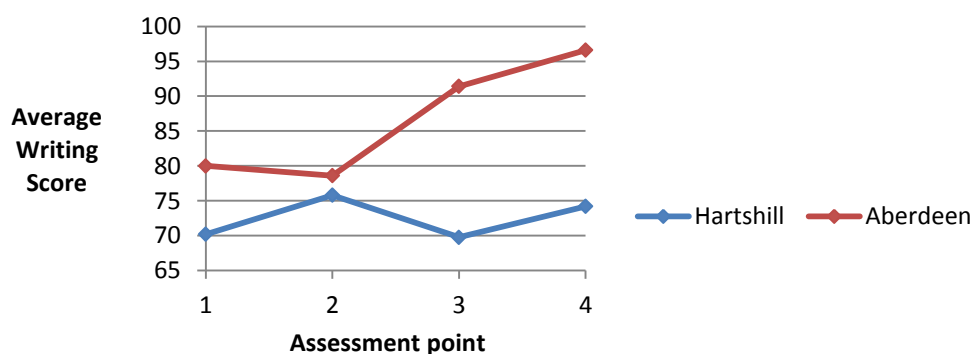
If we look more closely at learners who started with lower achievement levels in their written assessments then the results demonstrate the advantages Read&Write can bring for this group (Fig 4). We took the lowest five scorers from each school and the outcomes showed a clear difference between the Read&Write users and those who had no exposure to Read&Write. Both groups saw a trend upwards over the year reflecting overall positive progress in the average scores. **Over the course of the study, the Read&Write users in this lower achievement group saw an average increase in the writing scores of 13.7% compared to 4.2% for the non Read&Write users.**

Fig.4 Comparison of writing assessment scores: Lowest 5



Again, if we look more closely at the breakdown of different types of user amongst the Read&Write learners, where Aberdeen Grammar had the more intensive, focused use and Hartshill the more general, self-managed use, an even more significant difference is evident (Fig 5). **The lowest 5 Aberdeen Grammar learners showed an increase of 20.8% in their writing scores, compared to 5.7% for the Hartshill learners.**

Fig.5 Comparison of writing assessment scores: Lowest 5 Read&Write users only



Where the learners who struggled at the beginning of the year at both schools showed a good improvement over the year, it is clear to see the steep incline representing the learners at Aberdeen Grammar. After an initial slow start in terms of their writing achievement, these learners made great strides and by the end of the year were achieving results far above their starting point.

In summary, our data shows that Read&Write users did better, average reading ages increased and average writing scores increased more than for non-Read&Write users. The improvement amongst learners who started at the lower end showed the greatest step up, especially amongst those from Aberdeen Grammar.

Key quotes:

“It definitely helped my writing, There are more chances to fix your mistakes. And it gives you a

better vocabulary” *Learner*

“I would recommend Read&Write to help pupils produce more work, particularly for those pupils who have barriers to learning, and particularly at that this age” *Teacher*

Specific Results Relating to Impact on Motivation, Engagement and Confidence

Throughout the course of the study, learners and teachers spoke to us about how they were using Read&Write, their preferred functions, practical barriers, their impressions of their own progress in literacy and their general feelings towards their reading and writing activities inside and outside school. As mentioned earlier, these results must be viewed in the context of the trends observed for learners of this age, as research shows that enjoyment and engagement with reading and writing can fall away compared to earlier years⁵.

We were fortunate to have a great deal of qualitative data from our engagement activities and a number of clear messages emerged from both learner feedback and teacher observation. Alongside this, the motivation survey carried out at the beginning and end of the year highlighted some interesting changes. The following section will outline the main themes that emerged in this particular area of the study.

Confidence

Our study clearly showed that Read&Write learners experienced a positive impact on their confidence levels as a result of using the technology. This was something that was both self-reported and observed by their teachers.

At a fundamental level, the learners using Read&Write over the year gave consistently good feedback on their enjoyment levels of using the tool. At Aberdeen Grammar, where the usage was intensive and focused in certain lessons, the learners reported that these lessons were more fun and engaging, with Read&Write adding a new facet to their learning. Even setting aside the novelty factor experienced at the beginning of the year, these learners continued to enjoy lessons where they could use Read&Write; the use of the picture dictionary, colour highlighting and customising their toolbar all being elements that they found appealing. This basis of enjoyment and engagement clearly gives an excellent foundation for learning, with learners being more motivated in the classroom when learning activities appeal to them.

Research shows that enjoyment and increased motivation can lead to a greater focus on the task in hand and higher achievement in literacy⁶. Our study showed that Read&Write supports this important element of learning. Learners reported that with the helping hand of Read&Write they felt more inclined to persevere with their work even if there were challenges – Read&Write gave them the tools to overcome queries themselves as they arose rather than having to ask for help.

⁵ *Children and Young People’s Writing 2017/2018* National Literacy Trust 2018

⁶ *Celebrating Reading for Enjoyment. Annual Literacy Survey 2016.* National Literacy Trust Research Report 2017

They found that their confidence around reading and writing increased as they continued to use Read&Write. Many of the learners openly commented that they felt it was helping them with specific elements of the work; this included spelling, vocabulary, comprehension, and general improvements in the quality of their writing as the year progressed. Particularly interesting was the progress made by learners who seemed under-confident in their ability at the beginning of the year but who were increasingly enthusiastic as the year progressed. Although other factors may of course play into this sentiment of self improvement, it was interesting to observe that learners cited Read&Write as a useful and supportive tool in enriching their learning experience.

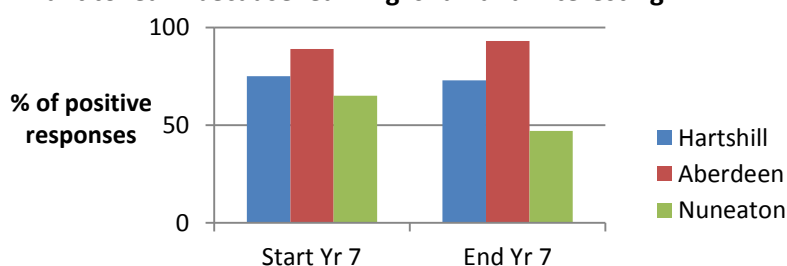
Teachers also noted increased confidence amongst Read&Write users, both specifically around literacy but also generally in terms of attitude to learning. More confidence was noted in relation to reading and writing tasks as the school year progressed, and learners were seen to become more active contributors to lessons and show a greater willingness to participate with group activities. Teachers also observed an increase in learner confidence to start a task without too much prompting, or to continue with a task where previously they may have given up.

An indication of increased confidence was also evident in learners' willingness to have a go and to risk making mistakes, a critical part of learning. Teachers observed this characteristic in Read&Write learners and commented that these learners would attempt a task knowing that they could check elements of their written work using Read&Write before submitting. Our engagement activities and discussions with the participants also showed that some of the quieter learners developed a greater willingness to speak and contribute as they used Read&Write more, whereas previously they may have feared sharing their opinions and thoughts.

At Aberdeen Grammar, the teachers reported that once learners had become used to working with Read&Write it became like second nature to them, enabling more efficient use of their time. The confidence it gave them to be able to start a task immediately without any technical problems or difficulties reinforced their feelings of empowerment.

All these elements of confidence boosting were further underpinned by the results of our motivation survey, with Read&Write learners indicating more positive responses at the end of the year than those who had no access to Read&Write. For example, in response to the statement 'I want to learn because learning is fun and interesting' (Fig.6), learners from the Read&Write cohort showed consistently encouraging answers, showing either the same level or an increased level of positive responses between the beginning and end of the year whereas the non-Read&Write school had become less positive towards the end of the year, dropping from 65% to 47% of positive responses (learner enjoyment being a common casualty of the challenging realities of the first year of secondary school). This was a consistent pattern across many of the survey results around learner confidence, motivation and engagement.

**Fig. 6 Comparison of motivation survey results:
'I want to learn because learning is fun and interesting'**



Another highlight from the motivation surveys showed an enthusiasm across the board for learning with technology. When rating different activities, learning with technology consistently came in the top three with all learners, both amongst the Read&Write users and the non-Read&Write users - an encouraging indication that learners at this age enjoy using technology in the classroom thereby creating a more positive learning environment.

Key quotes:

“At the beginning, my reading and writing could have been better, but now I feel like it’s quite a bit better. Read &Write has definitely helped with my reading” *Learner*

“Lessons with Read&Write are a bit more fun than normal lessons” *Learner*

Independent working

A natural extension of increased self-confidence amongst learners is the capacity for independent working and this was another benefit observed by teachers and learners themselves across the Read&Write cohort. They jointly felt that with Read&Write available to use as an aide and support, they were able to progress with tasks more readily and with less continuous input from teachers.

If Read&Write supports learners at this crucial stage of their education, the ability to work on their own initiative and to self-motivate is undoubtedly an advantage. The type and level of intervention then required by a teacher on a written task, for example, would be more focused around developing style and creative skills, rather than purely correcting spelling mistakes or punctuation. Moreover if a learner is correcting their own errors with Read&Write then they are more likely to avoid the same mistake in the future. The benefits of working independently with Read&Write as a help are evident for both the learner themselves, and the teacher.

Autonomy is an important element in supporting motivation. This in turn plays a key role in the quality of the learning experience. How much learners learn can be directly related to their motivation levels, and the degree to which they are prepared to sustain the level of effort and determination required to complete a learning task. Teachers reported that the amount of focused time on tasks was increased where learners felt able to keep trying on their own before asking for

help. Equally, many of the learners reported that they enjoyed working quietly on their own initiative, with Read&Write there to support them if they wanted to check work or look things up, rather than having to ask the teacher for help straight away. They also commented that this was an easier way to complete a task, rather than without the direct support of Read&Write, where other distractions could easily creep in and the typical reaction might be to put up your hand to ask for help at the first hurdle.

The freedom that Read&Write can create for individual learners through this capacity for independent working is empowering for the learner. The feeling that they can help themselves, rather than ask for help, can contribute positively to levels of self esteem – a vital element of learners’ development at this stage of their education.

Key quotes:

“I would describe it as a helpful programme, to help you understand better, to help you do your own work better, and not ask people, and just do it at your own pace” *Learner*

“I like the way it can read my work back to me so I can tell if it makes sense more easily than reading it to myself. It’s a good way of checking when you’re working on your own.” *Learner*

Behaviour

Perhaps a less obvious but nonetheless important advantage observed amongst Read&Write users was the indirect affect on their behaviour in the classroom. This was something that was evidenced primarily via the comments of participating teachers – their observations of classroom conduct amongst Read&Write users were largely very positive. The overlap between these less direct benefits is perhaps to be expected but nonetheless encouraging, with increased confidence and a greater ability to work independently helping to improve general conduct.

Once learners had adapted to integrating Read&Write into their lesson time and become accustomed to the use of technology as a tool to support everyday literacy tasks, the increased focus commented on earlier no doubt had an effect on learners’ behaviour. Concentration and application amongst learners led to comments from teachers reflective of a greater degree of calmness and order in the classroom (something teachers were very supportive of).

Another aspect worthy of note is the element of fun that Read&Write brought to the classroom. Learners reported generally enjoying using technology in lessons, and their comments in the interviews and focus groups pointed to an increased level of enjoyment when using Read&Write, something that positively influences motivation and eagerness to learn.

Key quotes:

“My colleague came into the classroom and commented with surprise how calm they all were!”
Teacher



Specific Results Relating to Teacher Experience

Not only did the staff involved in the study provide us with important commentary on learner progress and their attitudes to literacy and learning, but they also were able to bring their own insights into how Read&Write had been integrated into the school and to explore the impact of the technology on the experiences of the teacher in the classroom. The following section summarises our key findings in this area.

Implementation and Usage

The Read&Write schools involved in the study were first time users of the tool and part of their experience during the year was the process of implementing Read&Write in their lessons as well as the delivery of training and communication across colleagues and the school as a whole.

The ease of initial implementation is clearly key to achieving the best results from any newly introduced technology and all users were positive about how straightforward this had been with Read&Write. It was widely reported amongst the teachers that there were no problems associated with incorporating the tool into their lesson planning. Whether lessons were planned specifically taking account of access to Read&Write, as for Aberdeen Grammar, or where Read&Write was used in a pupil-led way as at Hartshill, teachers were very positive about how easy it was to integrate into existing or new lesson plans and did not report any technological hurdles or problems. They found it simple to use and they were able to get up and running very quickly with just a small amount of training.

Equally - and as mentioned earlier in the report - the positive impact of Read&Write on learner behaviour and attitude had a direct effect on classroom management. Teachers felt that with a calm and focused group of learners using Read&Write, overall classroom management was easier and the learning environment enhanced.

Noting the difference in approach between the implementation and integration of Read&Write within the two Read&Write schools, we can intuit that this had some bearing on the achievement levels commented on in earlier sections. It was noted that Aberdeen Grammar had the benefit of the support of a city-wide technology strategy. Furthermore, the decision they took to involve learners in using Read&Write within dedicated lessons at the same time each week and with the same teachers in the same location gave a continuity of experience that significantly impacted on the degree to which Read&Write was used. At Hartshill, learners were acting in a more independent capacity, albeit using Read&Write as part of a wider approach to tackling literacy issues for Year 7 learners. The implementation at Hartshill relied more on learners identifying lessons where they could use Read&Write and then collecting an allocated laptop prior to each lesson. In theory, this approach could have garnered greater impact as the technology was more widely available to learners at Hartshill compared to the situation at Aberdeen Grammar. However, because of a weakness in the level of support given to students coupled with practical issues relating to the storage and collection of laptops, the net result was that learners lost momentum in terms of their use of Read&Write and so the benefits diminished. This was highlighted by the teachers at Hartshill and recognised as an issue that will be addressed at they move into year 2 of their implementation of the technology.

The highly positive outcomes of the impact assessments at Aberdeen (in comparison to moderately positive results from Hartshill) likely relate to the method of deployment of Read&Write there. With the support of the local authority and within the context of a wider technology strategy, the implementation process and integration into school life will no doubt have benefited the level of usage and therefore the impact. The conclusion is that Read&Write has a positive impact on a majority of learners but that usage level is critical to the increase in literacy levels.

It is true to say that at Hartshill, there were no problems with implementation. However there were challenges around the general adoption of technology where teachers were not aware of the product and some learners experienced an initial resistance to their use of the tool within the classroom. This added to the caution that some learners exhibited towards regular use of the technology. This does not reflect negatively on Read&Write at all but rather relates to the use of dedicated laptops in lessons where not all students have access to the same technology and teachers fail to embrace this as part of their teaching environment. Communicating about Read&Write across the school to all staff understandably presented some challenges and was not consistently effective in the early part of the year. Had Hartshill benefitted from a similar local authority or even trust-wide initiative, this may have helped in supporting communication efforts across the school and also may have promoted a wider acceptance of the technology strategy for all. This is particularly important where the use of Read&Write is more self-directed – success in this approach must be built around a supportive and fully engaged teaching group, particularly with learners of this age who, whilst able to manage their own learning to a degree, still need the right level of guidance and encouragement.

Impact on teaching

Taking into account the ease of adoption of Read&Write, particularly at Aberdeen Grammar, and the subsequent effect on classroom management, it is not surprising that teachers also felt that Read&Write facilitated increased efficiency in the classroom. They reported that having Read&Write as a support and extra string to their bow helped them give the right level of support to different types of learner, and gave them the ability to focus on learners in need of more attention.

The ability to create time rather than take time was appreciated as a valuable benefit within the context of a busy classroom. The reduced effort required to oversee and handhold learners using Read&Write was a big positive, and teachers felt this enabled them to be more flexible in how they managed lessons. It was also noted that Read&Write complemented other techniques for improving literacy, such as one-to-one support.

The overall effect of Read&Write for teachers was a feeling of being supported by an easy-to-use tool and of having a technology that was consistent with their own efforts to support learners, particularly in relation to those who needed more support. Their goals of encouraging more focus and motivation amongst learners and seeing the positive impact of their teaching on individuals and the whole class were enhanced by the effective implementation of Read&Write.

Key quotes:

“I can add so much more value as a teacher when I’m not constantly just checking spellings every time they put their hand up, and it’s much more rewarding to be able to help them develop their writing skills in other ways” *Teacher*

6. Case Studies

Shari's story

Shari is 12 years old and is coming towards the end of her first year at secondary. She is in a mixed ability English class and started the school year as one of the quieter members of the group. Her ability and confidence levels were a little lower than her peers. She struggled to organise her written work and found remembering some simple spellings challenging. She didn't like putting her hand up, and as a result kept some of her ideas to herself.

She took to Read&Write quickly and enjoyed the opportunity to work on her written pieces at her own pace - Read&Write was her helping hand. Her confidence around literacy grew. Over the year, she felt more inclined to contribute and became a more active and engaged member of the class.



The results of Shari's reading and writing assessments show her increasing level of achievement by comparison to the average in the class. She has made great strides. At the beginning of the year her reading age was 8.4 yrs, below the class average of 11.2 yrs and in the 20th percentile in the group. At further assessment points during the year, her reading age increased significantly bringing her up to a reading age of 12.4 yrs at the final assessment point. By charting her progress this way we can see how far Shari has progressed, even compared to her more academic classmates. With such a positive increase in her reading age - and the consequent improvements in

her writing - Shari goes into her next year at secondary school with a sound basis for making great progress with her learning.

It is clear to see how Shari has developed over the year, not just in terms of her achievement but through her evolving personality. The confidence she gained from her noticeable advances in literacy thanks, in part, to Read&Write speaks volumes. By the end of the year she had blossomed into a more confident member of the class, ready to engage and much more comfortable with her ability to take on diverse learning challenges.

"I would describe Read&Write as a helpful programme, to help you to understand better, to help you do your work better, and not ask people, and just do it at your own pace."

Shari

"Shari was one of the class that was quite hard to get to know at the beginning. By the end of the year she was volunteering to read aloud, and even read in character, and was generally much more smiley and cheerful. Definitely more content"

Shari's English teacher

Marcus' Story

Marcus has autistic spectrum condition traits which mean that he sometimes has difficulty taking and following instructions. Compared to his peers, he is socially immature and sometimes struggles to engage with others. This puts him at a real disadvantage in the classroom. His problems with eye contact mean he's often disengaged with what's going on and appears not to be listening.

Marcus is in his first year at secondary school and in a mixed ability English class. He was introduced to Read&Write during their first term along with all his classmates. Marcus didn't take to it straight away but with some encouragement started to enjoy the additional support and focus it gave him. To be working on the computer seemed to help him slow down, think about his work and consequently make fewer mistakes. When he found out he could translate text into his second language - Spanish - he enjoyed trying out how it sounded and it really increase his enthusiasm for written tasks.

By the end of the year, there was marked improvement in this ability to engage in the classroom. His reading age has improved to bring him in line with the class average

But the greatest progress for Marcus has been in his level of focus and his ability to stay on task when he needs to. Of course Marcus still has his off days, but his enjoyment of Read&Write has shown benefits to his confidence, engagement and all round development and has certainly helped to set him on course to get the most out of his learning.

"Read&Write is useful as I normally go too fast and my writing is really messy. I get a bit confused with all the buttons sometimes. But it helps me understand what words mean and I do enjoy it. I think it really helps me"

Marcus

"At the beginning of the year, Marcus struggled with eye contact and would hardly even look at the board, let alone look at me. He found it hard to focus with Read&Write to start with, as he was distracted by all the different functions, but after a while it really helped him stay 'on task' and his focus improved. He has enjoyed using it, especially as he has Spanish as a second language, so he's liked trying out the translation function. Over the year, I've really noticed his eye contact improving and he is less easily distracted"

Marcus' English teacher

Catherine: A Teacher's Story

Catherine has a passion for language and literature. Her decision to go into teaching was driven by her desire to work with young people of all abilities and to share her enthusiasm for the written and spoken word. She qualified as a teacher 5 years ago and since then has worked at a mid-sized secondary school, teaching pupils of all ages. She was enthusiastic about the chance to try Read&Write and has been integral to its uptake during the first year of roll out.

After her initial training, Catherine was clear about how she wanted to integrate Read&Write into her mixed ability Year 7 English lessons and saw no barriers to getting up and running. With access to computer facilities arranged for specific lesson times each week, she planned to introduce the whole class to Read&Write. Her approach was to take each Read&Write function in turn and base a lesson around its usage, ensuring that everyone was fully comfortable with what they were doing before moving on to a different function the next lesson. Within a few weeks she felt that the class were fully up to speed with Read&Write and she was able to plan her lessons and writing tasks knowing that pupils would get the full benefit of Read&Write's support.

Over time, Catherine observed how learners were able to work independently rather than relying on her regular interventions. As first year secondary pupils, confidence across the learning group was inconsistent, with learners regularly asking basic questions about their written work and wanting

"It was hugely beneficial in encouraging them to be more independent, and pick up on their own mistakes"

Catherine

things checked. With Read&Write, learners were able to check their own work first before putting up their hand to ask for her support. This helped to develop a more autonomous approach, and in turn led to more focus and greater confidence, particularly in learners who needed it most. Learners began writing longer pieces and developing their creative work, adding more detail and description. Catherine was delighted with the results she saw and felt that she was adding much more value as a teacher whilst Read&Write helped out with some of the more basic level of support.

Through her experience, Catherine was particularly taken with the benefits of Read&Write for struggling pupils. The SEN pupils, some of the slower-paced learners, as well as EAL pupils, really found Read&Write helpful with the read-back function being a particular favourite, as well as the picture dictionary. These pupils with some barriers to learning were able to use Read&Write to the full and benefit from the extra support it gave them especially once the technology became part of their learning routine.

"When we were working on Treasure Island, reading a play adaptation, one pupil with EAL found it particularly useful to use the picture dictionary as he was able to find pictures of pirate ships, treasure chests, etc., so he was able to participate much more than usual in the class, he felt a bit more involved."

Catherine

Jack's Story

As a self-aware 11 year old, Jack feels like he didn't do so well in his Year 6 SATs and starting secondary school put himself as 'below average' at both reading and writing. His benchmark scores in the study reflected this. He really enjoys maths and science, and reading factual books, and is planning on doing an apprenticeship or going to university when he's older, but he feels like he needs to improve in some areas in order to get there. He struggles with handwriting, and thinks he needs help with some elements of reading, especially longer words.

Jack describes himself as shy, although he's articulate and bright when in a smaller group. He noticed a big change from primary to secondary school and found it quite hard to make friends at the beginning of Year 7.

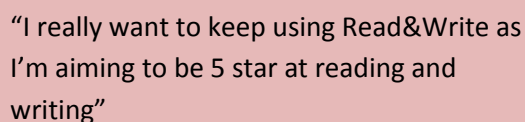
Jack loved using Read&Write throughout the year. Where some of his contemporaries found the benefits less pronounced after the novelty wore off - and some viewed taking a laptop into class as something that singled them out as different - Jack was clear; he really appreciated it. He felt the read-back function helped him a great deal with those longer words. Having access to Read&Write in all his lessons was the extra support he needed.

Although Jack's reading age remained at about the same level over the year, his writing assessments showed a big improvement of +6%, much higher than the average improvement for the Read&Write users of 3.5%. Although unaware of his assessment scores, Jack was pleased with his own progress in reading and writing at the end of Year 7 and his view of his own achievements was positive overall. He was really keen to continue using Read&Write to get himself up to '5 star level' which is where he feels he should be. He has big plans for his future and wants to be good enough to follow his chosen path.

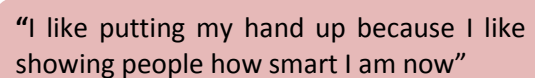


Writing
+6%

Jack's teachers describe him with a smile, they have seen him grow and flourish over the year. His initial reticence has changed and he's taking more of a role in the classroom and in wider activities throughout the school. He's even spearheaded the set up of an 'Environmental Crew' to help keep the school green, an idea he came up with and proposed to the Principal with the help of his best friend. It seems Jack is on track to achieve his potential, and in his eyes, Read&Write has played a big part in his progress.



"I really want to keep using Read&Write as I'm aiming to be 5 star at reading and writing"



"I like putting my hand up because I like showing people how smart I am now"

Appendices

Student Assessment Scores

Student no.	Baseline Assessment		2nd Assessment				3rd Assessment				Final Assessment			
	Reading Test Age	Writing WriQ Score	Reading Test Age	Reading Gradient	Writing WriQ Score	Sep-Dec WriQ% Diff	Reading Test Age	Reading Gradient	Writing WriQ Score	Sep-Mar WriQ% Diff	Reading Test Age	Reading Gradient	Writing WriQ Score	Sep-Jul WriQ% Diff
001	10.9	91	12.9	10.00	96	5.5%	12.9	5.01	97	6.6%	12.0	2.55	85	-6.6%
002	6.0	89	5.6	-2.00	95	6.7%	6.1	-0.12	95	6.7%	6.0	-0.04	79	-11.2%
003	6.4	59	6.4	0.00	60	1.7%	6.8	0.71	54	-8.5%	6.2	0.04	63	6.8%
004	9.8	88	7.8	-10.00	98	11.4%	9.4	-2.18	97	10.2%	9.8	-0.68	89	1.1%
005	7.2	97	8.2	5.00	98	1.0%	7.4	1.09	90	-7.2%	9.0	1.94	67	-30.9%
006	6.6	75	6.4	-1.00	44	-41.3%	6.1	-1.03	61	-18.7%	6.1	-0.77	48	-36.0%
007	7.6	89	7.2	-2.00	92	3.4%	8.2	0.77	91	2.2%				
008	7.0	74	6.1	-4.50	87	17.6%	7.4	0.07	78	5.4%	7.6	0.55		
009	9.8	83	8.2	-8.00	96	15.7%	8.8	-2.94	74	-10.8%	9.4	-1.28	88	6.0%
010	8.0	96	10.1	11.44	97	1.0%	8.0	1.54	97	1.0%	9.0	1.39	87	-9.4%
011	10.5	90	8.8	-8.50	97	7.8%	10.1	-1.96	98	8.9%	10.9	-0.26	92	2.2%
012	12.0	93	11.2	-4.00	96	3.2%	14.2	3.31	96	3.2%	13.4	2.28	94	1.1%
013	7.4	52	8.4	5.00	91	75.0%	7.0	0.03	90	73.1%	7.0	-0.35	91	75.0%
014	8.8	93	9.0	1.00	99	6.5%	9.0	0.50	92	-1.1%	8.0	-0.55	95	2.2%
015	9.8	84	11.6	9.00	95	13.1%	11.2	3.82	68	-19.0%	10.5	1.81	86	2.4%
016	9.0	83	10.9	8.78	90	8.4%	9.8	2.85	96	15.7%			88	6.0%
017	7.0	89	7.4	2.00	90	1.1%	8.0	2.06	96	7.9%	10.1	3.40	95	6.7%
018	9.0	82	13.4	22.00	88	7.3%					11.6	4.54	81	-1.2%
100	8.8	76	9.8	5.29	83	9.21%	9.0	1.48	88	15.8%	8.4	0.02		
101	10.1	72	10.5	2.12	59	-18.06%	14.0	8.67	97	34.7%	12.4	5.23	94	30.6%
103	7.4	77	10.1	14.29	85	10.39%	10.9	10.26	96	24.7%	8.4	4.30	98	27.3%
104	15.0	89	15.0	0	96	7.87%	15.0	0.00	90	1.1%	15.0	0.22	98	10.1%
105	11.6	84			68	-19.05%			76	-9.5%	12.0	0.75	96	14.3%
107	6.2	95	7.8	8.34	98	3.16%	7.6	4.65	91	-4.2%	8.4	3.85	93	-2.1%
108	11.2	88	10.5	-3.70	83	-5.68%	11.2	-0.74	93	5.7%	12.0	0.65	96	9.1%
109	9.0	89	10.1	5.82	94	5.62%	10.1	3.49	97	9.0%	12.4	4.82		
110	11.6	88	11.6	0	96	9.09%	14.0	5.08	94	6.8%	13.8	4.00	96	9.1%
111	8.4	87	9.8	7.40	91	4.60%	12.0	9.10	94	8.0%	12.4	7.23	96	10.3%
112	15.0	97	14.2	-3.84	91	-6.19%	15.0	-0.89	95	-2.1%	15.0	-0.89	98	1.0%
113	10.9	98	12.4	7.93	97	-1.02%	12.9	5.82	94	-4.1%	14.2	5.43	98	0.0%
114	14.2	93	13.4	-4.23	92	-1.08%	14.0	-1.27	94	1.1%	14.2	-0.40	94	1.1%
115	10.5	94	11.2	3.70	95	1.06%	14.0	8.15	95	1.1%	13.8	6.16	95	1.1%
116	14.6	96	15.2	3.17	96	0.00%	14.6	0.63	97	1.0%	15.0	0.64	98	2.1%
117		97	13.4		93	-4.12%	14.0		97	0.0%	11.2	-3.73	96	-1.0%
118	12.9	94	14.0	5.74	91	-3.19%	12.4	0.12	96	2.1%	13.8	1.02	96	2.1%
119	9.8	85	10.5	3.65	87	2.35%	9.4	-0.09	90	5.9%	10.5	0.74	97	14.1%
120	14.0	95	14.6	3.13	94	-1.05%	15.3	3.37	98	3.2%	15.3	2.48		
121	12.9		14.0	5.82	88		15.0	5.61	94		14.2	3.18	94	6.8%
123	15.0	93	15.0	0	88	-5.38%	15.0	0.00	97	4.3%	15.0	0.00	93	0.0%
124	12.0	86	14.0	10.58	93	8.14%	12.4	2.96	83	-3.5%	12.9	1.91	98	14.0%
125	11.2	91	12.9	8.99	95	4.40%	12.9	5.40	94	3.3%	14.0	4.75	94	3.3%
126	10.9	89	12.0	5.28	94	5.62%	12.9	5.29	98	10.1%	12.0	2.89	98	10.1%
127	11.2	82	13.8	13.76	91	10.98%	13.4	7.40	89	8.5%	10.9	1.98	96	17.1%
128	6.6	94	7.2	1.59	80	-14.89%	6.4	0.18	93	-1.1%	6.1	-0.45	66	-29.8%
302	11.2	96	10.5	-3.32	97	1.04%	10.9	-1.02	89	-7.3%	10.1	-1.43	93	-3.1%
303	9.0	97	10.5	7.11	97	0.00%	8.4	0.06	91	-6.2%	8.8	-0.16	95	-2.1%
304	8.0	78	9.4	6.64	71	-8.97%			84	7.7%				
305	9.0	94					9.8	1.60	90	-4.3%	6.6	-1.73	84	-10.6%
306	8.2	86	8.4	0.95	98	13.95%	8.2	0.15	95	10.5%	7.8	-0.31	95	10.5%
307	5.8	99	7.4	7.59	98	-1.01%	6.8	2.87	94	-5.1%	7.2	2.47	89	-10.1%
308	7.0	71	8.0	4.74	64	-9.86%	7.2	1.06	62	-12.7%	6.8	0.26	71	0.0%
309	10.5	87	10.1	-1.90	86	-1.15%	12.9	3.81	96	10.3%	10.9	1.94	94	8.0%
310	8.2	99	7.8	-1.90	94	-5.05%	9.4	1.76	90	-9.1%	8.0	0.55	94	-5.1%
311	9.0	93	11.6	12.32	90	-3.23%	9.4	2.57	94	1.1%	7.2	-0.58	97	4.3%
312	9.0	94	9.8	3.65	97	3.19%	9.8	1.94	93	-1.1%	8.0	-0.09	93	-1.1%
313	8.4	94	8.8	1.82	94	0.00%	7.8	-0.71	94	0.0%	8.0	-0.66	90	-4.3%
314	7.8	99	8.8	4.74	99	0.00%	8.2	1.40	93	-6.1%			93	-6.1%
315	9.8	91	10.1	1.42	98	7.69%	10.9	2.09	86	-5.5%	10.1	1.14	89	-2.2%
316	8.8	98	10.5	8.06	93	-5.10%	8.4	0.55	93	-5.1%	9.8	1.14	95	-3.1%
317	7.8	94	8.2	1.90	94	0.00%	8.4	1.32	97	3.2%	6.2	-0.92	93	-1.1%
318	9.0	93	9.0	0	93	0.00%	8.0	-1.70	96	3.2%	8.2	-1.44	84	-9.7%

Student Motivation Survey

Read&Write Student Survey

Tell us what you think

We want to know how you feel about ways of learning, inside and outside school. Please take a minute to think about the following questions and answer as honestly as you can. There are no right or wrong answers, just your views that count.

*** 1. Name**

*** 2. Date of birth**

DD MM YYYY

Date of birth / /

*** 3. How much do the following activities interest or engage you?**

	Not interested	A little interested	Fairly interested	Very interested
Discussions and debates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning with technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Giving presentations and speeches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listening to teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading to yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 4. How much do you agree or disagree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
I have the skills and ability to complete my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy learning in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put a lot of effort into my school work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very curious to learn about other things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy being challenged when I am learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find reading boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy writing tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer to learn on my own than work with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 5. How often do you do the following?

	All the time	Very often	Not very often	Never
Come to class with homework completed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ask or answer questions in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talk to a teacher about your work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work with other students on a project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complete a piece a creative writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make a presentation in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research a topic at home (using the internet for example)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 6. How much does being at school help you to develop the following skills?

	Not at all	A little	Quite a lot	Very much
Being able to write well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to read well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speaking well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 7. How much do you agree or disagree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
I want to learn so that I can be successful in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to learn so that I can get good grades and do well in exams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to learn because learning is fun and interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher makes me enthusiastic about learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am excited by classroom learning activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take pride in the quality of my school work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take pride in my written work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about who I am as a student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Read&Write Evaluation

STUDENT FOCUS GROUP GUIDELINES

SEPTEMBER 2017

Focus groups will be critical to the process of evaluation. The purpose of focus groups, within the context of the wider pilot study, will be to:

Initially...

- understand the context that participating students are experiencing in relation to their literacy, reading and writing
- get a sense of their feelings towards reading and writing tasks – what they like, don't like, excel at, struggle with etc.
- understand their relationship with technology, particularly in terms of how they use technology for study and research
- develop a relationship with the group and get them up to speed on the study and what we are trying to do

Subsequently...

- create a forum for students to discuss what they think about Read&Write and how they are using it as part of their studies
- explore how they are using Read&Write
- give them the chance to feed back on what they like and don't like about Read&Write
- develop a sense of the kind of impact (if any) Read&Write is having on their literacy and on how they feel about reading and writing tasks

The process of student focus groups will adhere to the following protocols and rules:

- We will clearly explain to all participants who we are and what we are doing
- We will clearly record the number of students taking part and the relevant demographic information for those students
- We will have clear questions as guidance but will allow students to talk freely about their experiences and encourage them to share their feelings regarding Read&Write and their literacy as a whole
- We will be careful not to create a negative conversation by focusing on positives and being sensitive to the potential challenges that students may be facing
- Student participants should be reassured at the beginning of the focus group that anything they say is shared in confidence and that their names will not be used in any reports
- Moreover, it should be made clear that what we are looking for is honest feedback and that their views are very important to that process
- Focus groups will ideally involve a minimum of 4 students but no more than 8
- Focus groups will make the best of the time we have but will most likely last between 30 and 45 minutes

- Focus group sessions will be audio recorded for reference

Once the focus groups have been completed, all notes will be written up into a more coherent report summarising the findings to be taken from the process for input into the wider report that will draw from multiple focus groups.

The following questions can be used as guidance questions although an open conversation is sought and we should not stick too rigidly to these prompts:

For the initial focus groups (prior to the introduction of Read&Write):

- What kinds of books do you enjoy?
- Who are your favourite authors?
- What do you like most about writing?
- Is there anything you don't like about writing tasks?
- What's most difficult for you when you are asked to complete a writing task?
- What about a reading task?
- How do you usually approach doing research (for science, history or geography for example)?
- Do you use the internet for research?
- How easy do you find it to use the internet?
- How else do you use technology as part of your studies?
- Do you usually write using a computer or by hand or is it a mixture of both?
- Do you find one easier than the other?
- What would you like to get better at in terms of your reading and writing?
- What would you like to do more of in terms of your reading and writing?
- What would you like to do less of?
- What do you think would make your reading and writing tasks easier?
- Any other comments?

For the subsequent focus groups (following the introduction of Read&Write):

- What do you think of Read&Write as a tool?
- Has it helped you and if so, how?
- How often do you use it?
- When and where do you use it?
- What are the best things about Read&Write?
- What are the worst things about Read&Write?
- How do you feel about the progress you're making in terms of your reading/writing?
- If you have made progress, what are the reasons for that progress being made?
- What would you like to do more of in terms of reading/writing?
- What would you like to do less of in terms of reading/writing?
- What's most difficult for you when you are asked to complete a writing task?
- What about a reading task?
- What would you like to get better at in terms of your reading and writing?
- Any other comments?