

West Dunbartonshire Council

Reciprocal Teaching: Raising Attainment through the Development of Higher Order Thinking Skills

Report compiled by West Dunbartonshire
Psychological Service,
September 2014 to June 2015

INTRODUCTION

Raising attainment and achievement is a major education priority both nationally and locally. Therefore one of the key objectives in West Dunbartonshire's Educational Services departmental plan is raising attainment and improving learning. Over the last few years, the Psychological Service had been working closely colleagues across Educational Services to raise attainment through improving literacy. The revised literacy strategy focusses on the need to develop higher order literacy comprehension skills in our learners. As a result, this became a key focus of The WDC led 'Hub Literacy Project' (2012-14) funded by Scottish Government. This project demonstrated that the structured and systematic implementation of the Reciprocal Teaching methodology can lead to significant gains in reading comprehension skills as well as gains in reading accuracy and reading rate for pupils of all ability levels.

In May 2014, the Joseph Rowntree Foundation published a report, 'Closing the Attainment Gap in Scottish Education,' which recommended, that in order to improve the educational outcomes of children living in poverty, interventions needed to be informed by research and evidence, include metacognitive training, pupils working collaboratively with the teacher facilitating and be data driven to allow the monitoring of impact.

The implementation of the Reciprocal Teaching methodology in West Dunbartonshire meets these key Rowntree recommendations. WDC is the second most deprived local authority in terms of 'income deprived' population and 49% of primary aged children are entitled to free school meals. The Reciprocal Teaching methodology has a robust evidence base, includes a cooperative learning style, metacognition is supported throughout and progress is monitored in line with implementation science. Specifically, Reciprocal Teaching is an instructional approach and dialogue based framework based on the skills necessary for good comprehension. The approach is based on practitioner's explicitly teaching four key strategies and facilitating high quality discussion. In addition, the West Dunbartonshire approach incorporates four crucial foundations to enhance practitioner's skills to support learning and teaching.

Over the course of 2014-15 Educational Services provided some additional funding to support the Psychological Service roll out Reciprocal Teaching across the

authority. In order to sustain the initial success found in the pilot, it was important to build in the same tracking and monitoring of progress, whole school training and teacher skill coaching as part of the implementation throughout the authority. This report outlines the results of the evaluation of the authority roll out of Reciprocal Teaching and the impact it has had on 'closing the attainment gap' within West Dunbartonshire.

AIMS

Previous local improvement data has demonstrated the success of implementing the West Dunbartonshire Reciprocal Teaching approach across the whole school. A key expected outcome during 2014-15 was to ensure similar success as the methodology was shared across the authority with a particular focus on improving the attainment of lower attaining pupils. In addition in line with the principles of curriculum for excellence it was important to achieve consistency and coherence of practice across transitions. Objectives were to increase pupil reading comprehension, develop higher order skills and to encourage the sharing of good practice and collegiate working.

Progress from September 2014 to June 2015

TRAINING AND COACHING

The impact data from the Hub project was shared at a Head Teachers meeting towards the end of the 2013 to 14 session. Following this, Head Teachers requested training from Psychological Service and were asked to be involved in the monitoring and tracking of progress over the course of 2014 - 15. A model of training was developed where all teaching staff were asked to attend an initial training session delivered by Psychological Service. Resources including the 'Practitioner's Guide to Reciprocal Teaching,' an assessment pack and a DVD illustrating West Dunbartonshire teachers implementing Reciprocal Teaching were shared with the school. Staff from 30 primary schools have been introduced to the approach with the initial training session for the 4 remaining primary schools planned for early in 2015-16.

Following a period of implementation, Psychological Service returned and provided a coaching session. This was focused on staff development, the teaching foundations and promoting professional dialogue. The coaching session aimed to develop

teacher 'craft' and build confidence. Of the schools which have received an initial training session, 16 have also received a coaching session.

Alongside this, to ensure a consistency of approach teachers from the Central Support Service, probationers and supply teachers have also received initial training. Two specialist schools have been introduced to the approach and are at the early stages of adapting the methodology to fit the needs of their children and young people.

In an effort to sustain the success demonstrated at primary, the approach has been shared with all five secondary schools with a principal focus in the English Departments. However, a number of teachers in other departments including chemistry and P.E have been implementing the methodology. Each secondary is at various stages of planning and development. At the request of secondary school staff, two English teachers were commissioned to develop bespoke assessments to capture the impact of Reciprocal Teaching in secondary pupils S1-3. These were devised to be similar to the assessments used from Primary 3 to Primary 7. These will be shared and piloted across the four other secondary schools in the next session.

To continue the consistency of approach across the curriculum, the methodology has also been introduced to Early Stages Teachers who have been implementing the approach in their associated ELCCs. The aim is to continue to develop the approach in the Early Years and monitor progress as well as train Early Years Practitioners. Following a training session for the Heads of Centre, 85% requested Psychological Service training for their whole staff team.

An overview of training provided throughout the year can be seen in Appendix 1.

SHARING RESOURCES

During the course of the session a number of new resources have been developed to continue the sharing of practice across the authority. Teachers from Early Years through to Secondary have been filmed implementing Reciprocal Teaching. Two films have captured the approach in the Early Years, six have been recorded at various stages of Primary and three have been filmed at Secondary in a variety of subjects. The film clips show teachers demonstrating different aspects of the reciprocal teaching approach including teacher modelling and scaffolding, cooperative learning, whole class lessons and pupils' opinion of the approach. These

will be used to support coaching sessions and provide practical suggestions for other practitioners.

A Reciprocal Teaching web page (Our Cloud) has been developed to support the implementation of the methodology across the curriculum from 3 to 18 years. The website contains various assessments, for example: to assess metacognition and observation schedules for Head Teachers. There is a discussion page and teachers from five primary schools shared a piece of text that they had used with their class and found valuable. This has created an initial bank of resources which teachers will be able to access and continue to contribute to. Screenshots from the Reciprocal Teaching Our Cloud page can be seen in Appendix 2.

RESULTS

Previous research considered the impact that the implementation of Reciprocal Teaching had on every child and over two years the collected data demonstrated an overall improvement in reading comprehension and higher order skill development. Pupil confidence in reading and metacognitive skills also improved. The focus of the data collection over 2014 -15 was the impact of Reciprocal Teaching on closing the attainment gap.

Bespoke measure of Reading Comprehension

The bespoke measure of reading comprehension is a pre- and post- measure which was piloted with approximately 900 pupils during the Hub project. It was taken from West Dunbartonshire's 'Reading Routes' a cross curricular approach to reading as the end of unit assessments in the resource focused on understanding and the higher order skills of analysis and evaluation reflecting the skills taught in Curriculum for Excellence and Bloom's taxonomy of learning domains. A matched passage and assessment was created based on readability scores and comparable content to create a pre-test and post-test measurement of reading comprehension. During 2014-15 these were completed by 1845 pupils from Primary 3 to Primary 7 from 14 primary schools across WDC.

To consider the impact of Reciprocal Teaching on closing the attainment gap, criteria was set to determine the lower and higher achieving groups. The lower achieving group scored 30% or less on the pre-test assessment of which there were 447 pupils and the higher achieving group scored 70% or more on the pre-test assessment of

which there were 370 pupils. Figure 1 shows the mean comprehension scores for the lower and higher achieving groups prior to and following the implementation of Reciprocal Teaching.

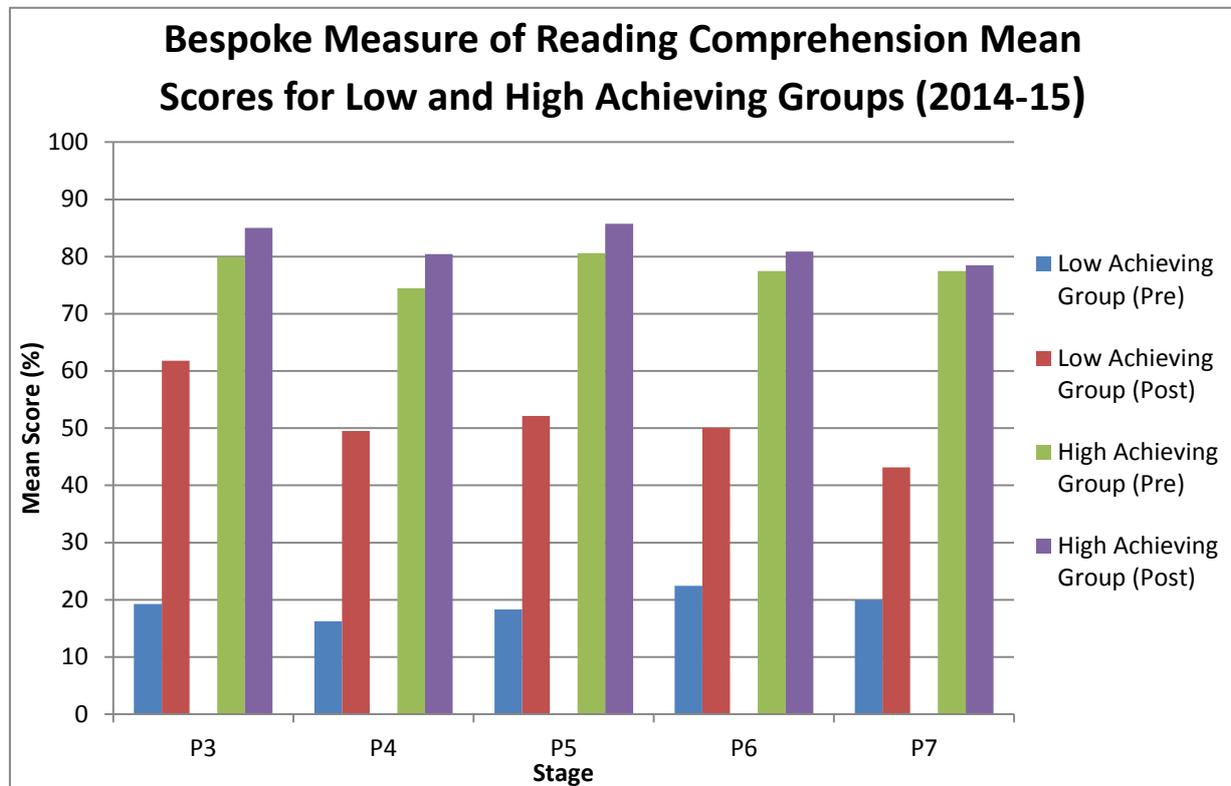


Figure 1. Mean Reading Comprehension Scores for Low and High Achieving Groups.

There were increases in comprehension score for the lower achieving group from P3 to P7 with the greatest difference in P3. The higher achieving group also demonstrated increased comprehension scores. The scope for change in the higher achieving group is much less compared to the low achieving group. At the follow up assessment, a number of children in the high achieving group scored the maximum at each stage therefore, there is a ceiling effect. Nevertheless, the mean difference at the baseline assessment between the low and high achieving groups was 57.5% and this reduced to 30.8% at follow up.

Figure 2 shows the individual higher order skills for both the low and high achieving groups prior to and following implementation of Reciprocal Teaching.

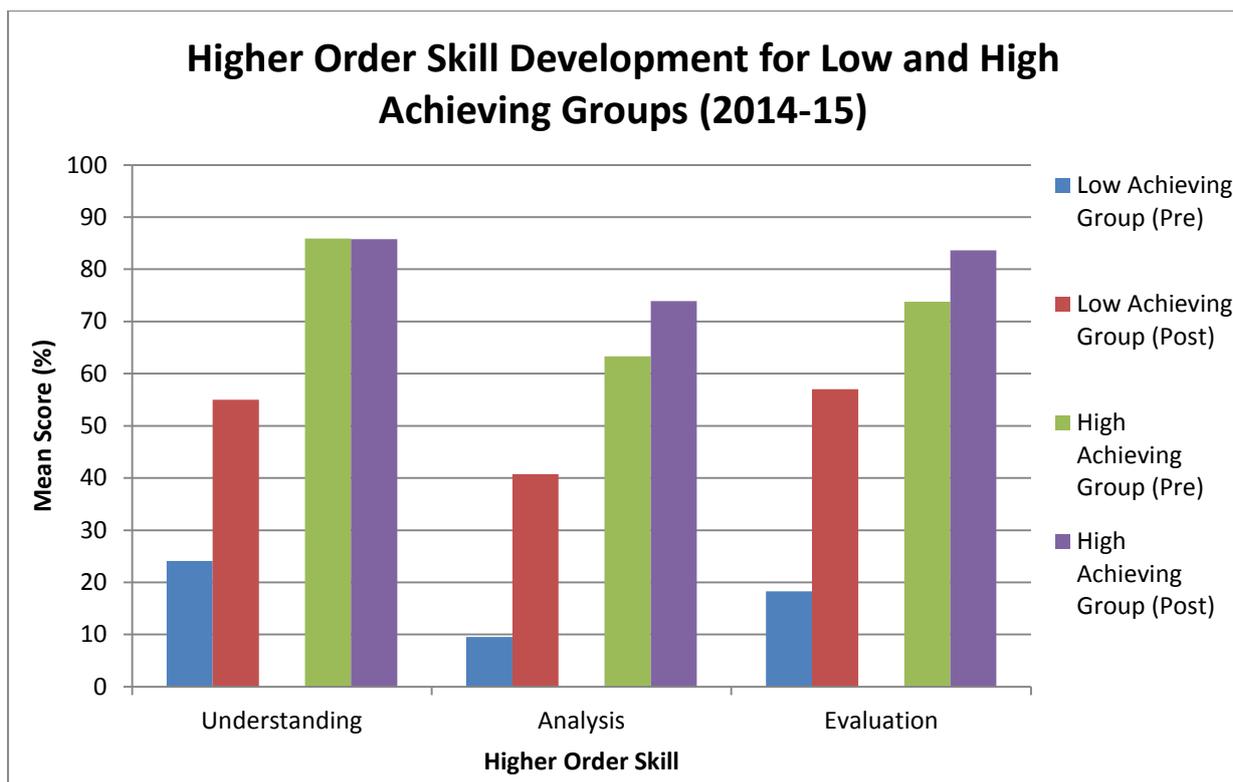


Figure 2. Mean Higher Order Skill Scores for Low and High Achieving Groups.

The lower achieving group demonstrated increases in each of the skills with the greatest difference in pupil ability to analyse and evaluate text indicating that Reciprocal Teaching is linked to the improvement of higher order skills. The higher achieving group shows no change in the mean score for understanding however, the score remains above 85%. The greatest changes for the higher achieving group follows a similar pattern to the lower achieving group with greatest development in the skills of analysis and evaluation.

Standardised measure of Reading Comprehension

As the bespoke measure of Reciprocal Teaching does not allow for improvements in comprehension to be wholly attributed to Reciprocal Teaching and some of the change may be due to typical development, a standardised measure of reading comprehension, York Assessment of Reading for Comprehension (YARC), was used with a small sample of pupils from two primary schools. Pupils from primary 4 were of mixed ability and attend schools which have a high percentage of free school meals.

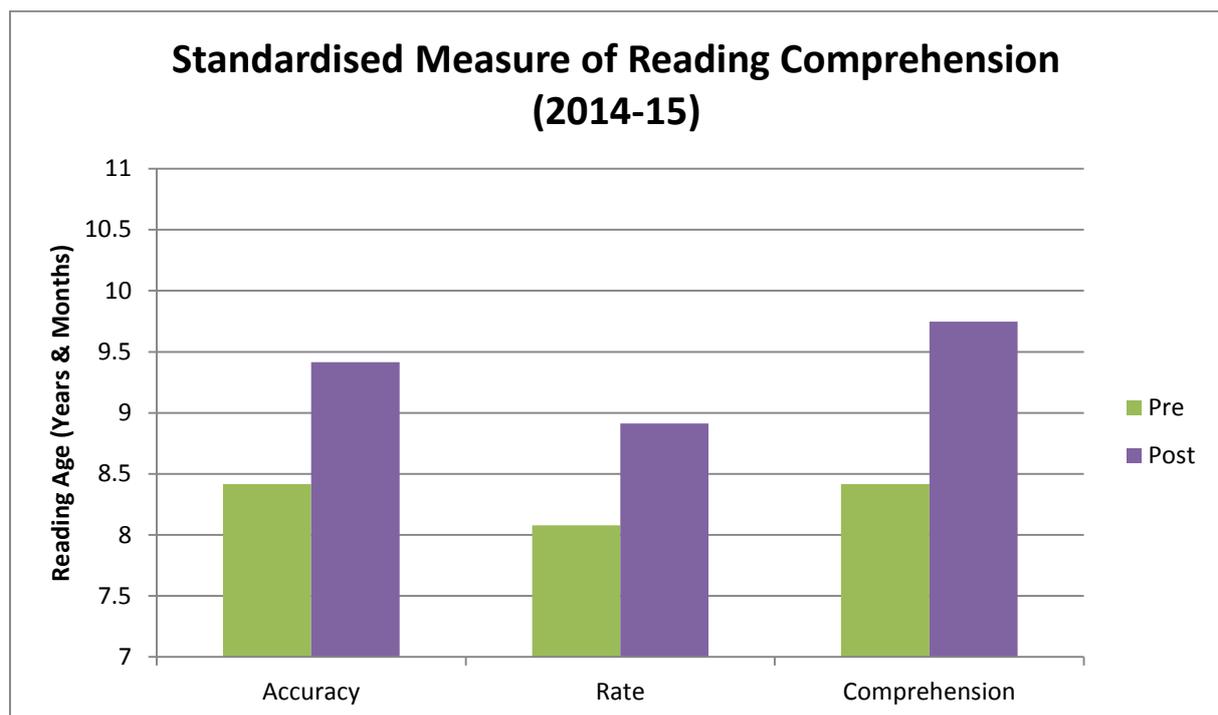
Table 1 shows the YARC assessment average reading ages and gains made in reading comprehension, accuracy and rate implementing Reciprocal Teaching.

Table 1. YARC assessment pre- and post- mean reading ages in years and months, gain in months and ratio gain.

	Pre-	Post-	Gain	Ratio Gain
Comprehension	8:05	9:09	16	2.6
Accuracy	8:05	9:05	12	2
Rate	8:01	8:11	10	1.6

c.a. 8:02

There was a gain in comprehension of 16 months of the reading age of the pupils and the ratio gain was found to be 2.6 months over a six month intervention period. Ratio gain is the improvement in months for each month Reciprocal Teaching was implemented. Reading accuracy and rate also improved beyond that of the intervention period. Figure 3 shows the mean reading ages prior to and following Reciprocal Teaching.



The figure shows the gains made in each of the reading skills across a six month period for the small sample of children in Primary 4.

Case Studies

To drill down and look at the impact Reciprocal Teaching has had on individual children, two case studies were carried out. Assessment data was triangulated with qualitative feedback from the child and their Class Teacher.

Case Study A

Case study A of is a Primary 4 child who at the start of the 2014 to 15 session was looked after in the care of the local authority. The previous year, the young person had had a disrupted year of school and was in the lower achieving group. The Class Teacher was implementing a formal Reciprocal Teaching lesson once a week lasting approximately an hour and at another point in the week, children had the opportunity to practice their skills during their guided reading lesson. The young person had been taught using Reciprocal Teaching for approximately 10 months and their reading age improved by one year. The bespoke assessment also found that their reading comprehension improved by 23%. The young person has some difficulty with decoding and fluency however, demonstrates a good understanding of strategies when supported to access the text. The Class Teacher also reported that the young person is **'more focused than usual during these lessons and shows a good understanding of texts,'** and that the young person **'is able to transfer skills to guided reading sessions and follow up tasks.'** The cooperative learning approach has also led to the young person being able to **'access a wider range of more challenging texts.'** The young person reported that they enjoy the approach, found it helpful and liked working in groups. The Class Teacher sets mixed ability groups ensuring that pupils are able to model strategy use to each other.

Case Study B

The Primary 4 young person has been exposed to Reciprocal Teaching for a full school year and has a focused lesson once each week lasting between 45 minutes to an hour. The young person's parents provide little support with their child's learning and haven't yet attended a parent's evening. The cooperative learning aspect of Reciprocal Teaching has helped to **'keep the young person focused and on task as they can be easily distracted.'** The young person has been able to use some of the strategies during their topic work and **'finds the props helpful.'** Towards the end of the 2014 to 15 session, the young person has been **'successfully working independently.'** The young person has been enjoying Reciprocal Teaching, **'Predicting is good fun, sometimes I like summarising, when I manage to clarify it feels good.'** The young person has also been enjoying taking books home to read and reported they **'like to go to the library and borrow books, I like to read Horrid Henry and Jacqueline Wilson, I usually go by myself or with my friend'** which is a new activity.

Head Teacher Survey

In June 2015, 27 Head Teachers of the 28 primary schools that had received the initial training session from Psychological Service were sent a questionnaire focusing on the whole school approach, implementation and parental engagement to allow a precise interpretation of any data they provided and also to give an overview of what stage each school was at and to allow more accurate forward planning for the next steps in implementation. Two Head Teachers were not sent the questionnaire as they had received training towards the end of the session.

The following Head Teacher survey information reflects 10 schools which returned the bespoke measure of reading comprehension and demonstrated the greatest improvements. This is to provide an overview of key factors which may contribute to raising attainment in literacy.

- 90% ($N=9$) of schools included Reciprocal Teaching on their improvement plan
- 80% ($N=8$) of schools have a working group or literacy champion focusing on Reciprocal Teaching
- 100% ($N=10$) of schools are implementing Reciprocal Teaching from P1 to P7
- 60% ($N=6$) of schools implement Reciprocal Teaching on two or more occasions each week
- 60% ($N=6$) of schools implement Reciprocal Teaching for more than 45 minutes each session
- 60% ($N=6$) of schools are implementing Reciprocal Teaching across the curriculum
- 100% ($N=10$) of schools have observations and monitoring by HT and/or SMT
- 100% ($N=10$) of schools have provided collegiate time focused on Reciprocal Teaching

A summary of the survey completed by all 27 Head Teachers can be seen in Appendix 4.

DISCUSSION

The aim of the project was to reduce the attainment gap between the lowest and highest achieving pupils in West Dunbartonshire through the implementation of the Reciprocal Teaching approach to improve reading comprehension and higher order

skills. The research has consistently demonstrated improvements in reading through the pilot project and continued to do so for both the lowest and highest achieving groups with the greatest improvements for the lower achieving group. The schools which demonstrated the greatest change for their lower achieving group were implementing the approach on at least two occasions each week lasting more than 45 minutes a session. Teachers were able to implement the methodology across the curriculum and Head Teachers were monitoring progress. The whole school approach to Reciprocal Teaching, from Primary 1 to Primary 7 provides consistency of learning and teaching.

Limitations of the research design include the scoring of the bespoke measure of reading comprehension. The number of schools planned to be trained during the session was originally 17. By the end of the session 30 schools had been trained and had been asked to complete the bespoke measure. Due to the increased number of submissions, each Class Teacher was asked to score the baseline and follow up assessments meaning that despite an answer scheme being provided there may be a degree of variability between teacher marking. Nevertheless, between the pilot and the current project the bespoke assessment has been completed by nearly 3000 pupils. It has proved a useful and reliable tool to gauge impact of reading comprehension and higher order skills. Reciprocal Teaching is a methodology rather than an exacting programme and so relies on the skill and enthusiasm of the teacher to regularly implement the approach in a creative manner. The standardised measure of reading comprehension was sampled with a small number of pupils at one stage. This is because it is an individual assessment and takes time to administer.

CONCLUSION

The continued support from Education Services has enabled Psychological Service to systematically deliver training to 30 primary schools with the aim of improving literacy across West Dunbartonshire. The project has provided further evidence about the effectiveness of Reciprocal Teaching for every child but particularly those who were initially in lower attaining groups.

NEXT STEPS

Preliminary actions have been taken to introduce Reciprocal Teaching into the Early Years with all Early Stages Teachers and Heads of Centre being trained. Collegiate time has also been provided to promote discussion and professional dialogue about the adaptations to the approach for the Early Years. A select group of Early Years Practitioners have also been introduced to the approach and there are an increasing number of early years establishments where Reciprocal Teaching practice is evident. In order to ensure that the current research results for primary age pupils are replicated in the Early Years it is important to develop a tracking tool to monitor progress, amend the Early Years Literacy Baseline to include reference to Reciprocal Teaching strategies, train Early Years Practitioners and provide a follow up coaching session in line with the current model of delivery. The success of the 'Practitioner's Guide to Reciprocal Teaching' in primary also needs to be adapted to suit the Early Years and include a wider focus on literacy such as how to share a story and guidelines to develop vocabulary.

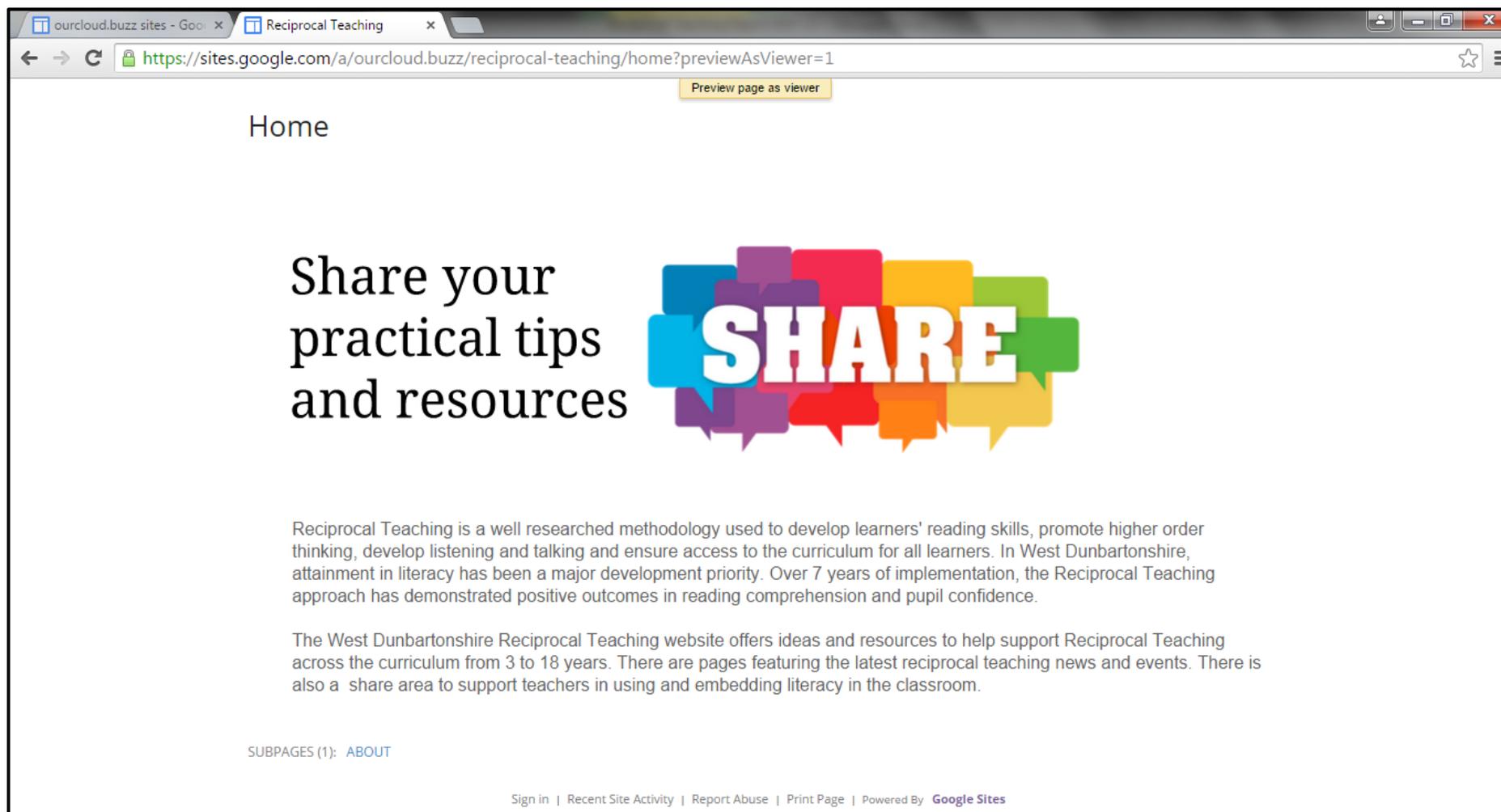
Development will also continue in Secondary schools, with the piloting of the new S1 to S3 assessments, the delivery of coaching sessions and the on-going secondary business meeting model to share practice, resources and experience.

Finally, the 4 primary schools which have not yet received an initial training session are due to take place early in the next session. The coaching sessions will also continue during the course of the year. Training for new staff and probationer's will continue to ensure that all staff have been trained in the approach.

Appendix 1. Overview of Training

	Primary	Secondary	Specialist/Support/Early Years
Initial training	<p>Aitkenbar Primary Bonhill Primary Dalreoch Primary Haldane Primary Highdykes Primary Kilbowie Primary Ladyton Primary</p> <p style="text-align: right;">N=14</p>	<p>Levensale Primary Our Holy Redeemer Primary Christie Park Primary Our Lady of Loretto Primary St Eunan's Primary St Mary's Primary, Duntocher Whitecrook Primary</p> <p style="text-align: right;">N=5</p>	<p>Clydebank High (English Department) Dunbarton Academy (English Department and 2 teachers from Social Subjects and 1 Science teacher) Our Lady & St Patrick's High (English Department) Vale of Leven Academy (1 PT English and 1 PE teacher) St Peter the Apostle (1 English teacher)</p> <p style="text-align: right;">N=4</p>
Initial training & coaching session	<p>Carleith Primary Clydemuir Primary Edinbarnet Primary Gavinburn Primary Goldenhill Primary Linnvale Primary Renton Primary St Kessog's Primary</p> <p style="text-align: right;">N=16</p>	<p>St Martin's Primary St Mary's Primary, Alexandria St Michael's Primary St Joseph's Primary St Patrick's Primary St Peter's Primary St Ronan's Primary St Stephen's Primary</p>	<p>Renton Language Development Unit</p> <p style="text-align: right;">N=1</p>

Appendix 2. Reciprocal Teaching Our Cloud Page Screenshots



The screenshot shows a web browser window with two tabs: 'ourcloud.buzz sites - Google' and 'Reciprocal Teaching'. The address bar displays the URL: <https://sites.google.com/a/ourcloud.buzz/reciprocal-teaching/home?previewAsViewer=1>. A yellow button labeled 'Preview page as viewer' is positioned above the main content area.

The page content includes:

- The word 'Home' at the top left.
- The text 'Share your practical tips and resources' in a large, black, serif font.
- A graphic of the word 'SHARE' in white, bold, sans-serif capital letters, centered within a cluster of colorful speech bubbles in shades of blue, purple, red, orange, yellow, and green.
- Two paragraphs of text describing the Reciprocal Teaching methodology and the website's purpose.
- A link for 'SUBPAGES (1): ABOUT' at the bottom left.
- A footer with links for 'Sign in', 'Recent Site Activity', 'Report Abuse', 'Print Page', and 'Powered By Google Sites'.

Appendix 2. Reciprocal Teaching Our Cloud Page Screenshots



The screenshot shows a web browser window displaying the 'Reciprocal Teaching' website. The browser's address bar shows the URL: <https://sites.google.com/a/ourcloud.buzz/reciprocal-teaching/resources?previewAsViewer=1>. The website header features a logo with three stylized figures in a circle above an open book, with the text 'Reciprocal Teaching' to its right. A search bar is located in the top right corner. Below the header is a navigation menu with buttons for HOME, LITERACY, RESOURCES (which is highlighted), PROFESSIONAL DEVELOPMENT, ASSESSMENT, SHARE, and NEWS. The main content area is titled 'Resources' and is divided into two columns. The left column is titled 'A Practitioner's Guide to Reciprocal Teaching' and contains two paragraphs of text. The right column is titled 'Text Extracts' and contains a paragraph of text. At the bottom of the left column, there is a graphic of the word 'RESOURCES' spelled out with colorful letters on a corkboard. The bottom of the page is partially cut off, showing the start of a sentence: 'If you would like to contribute to the resource bank please email an'.

ourcloud.buzz sites - Goo x Resources - Reciprocal Te x

Preview page as viewer

Reciprocal Teaching

Search this site

HOME LITERACY RESOURCES PROFESSIONAL DEVELOPMENT ASSESSMENT SHARE NEWS

Resources

A Practitioner's Guide to Reciprocal Teaching

West Dunbartonshire staff have contributed to a Reciprocal Teaching guide for practitioners. This is a useful resource to help introduce the strategies and to refer back to. The guide includes an outline of the four teaching foundations, pupil hand outs, suggested practical tools and leaflets for parents.

Each school will have a copy of the practitioner's guide in a binder which practitioner's can add to as they find useful resources.

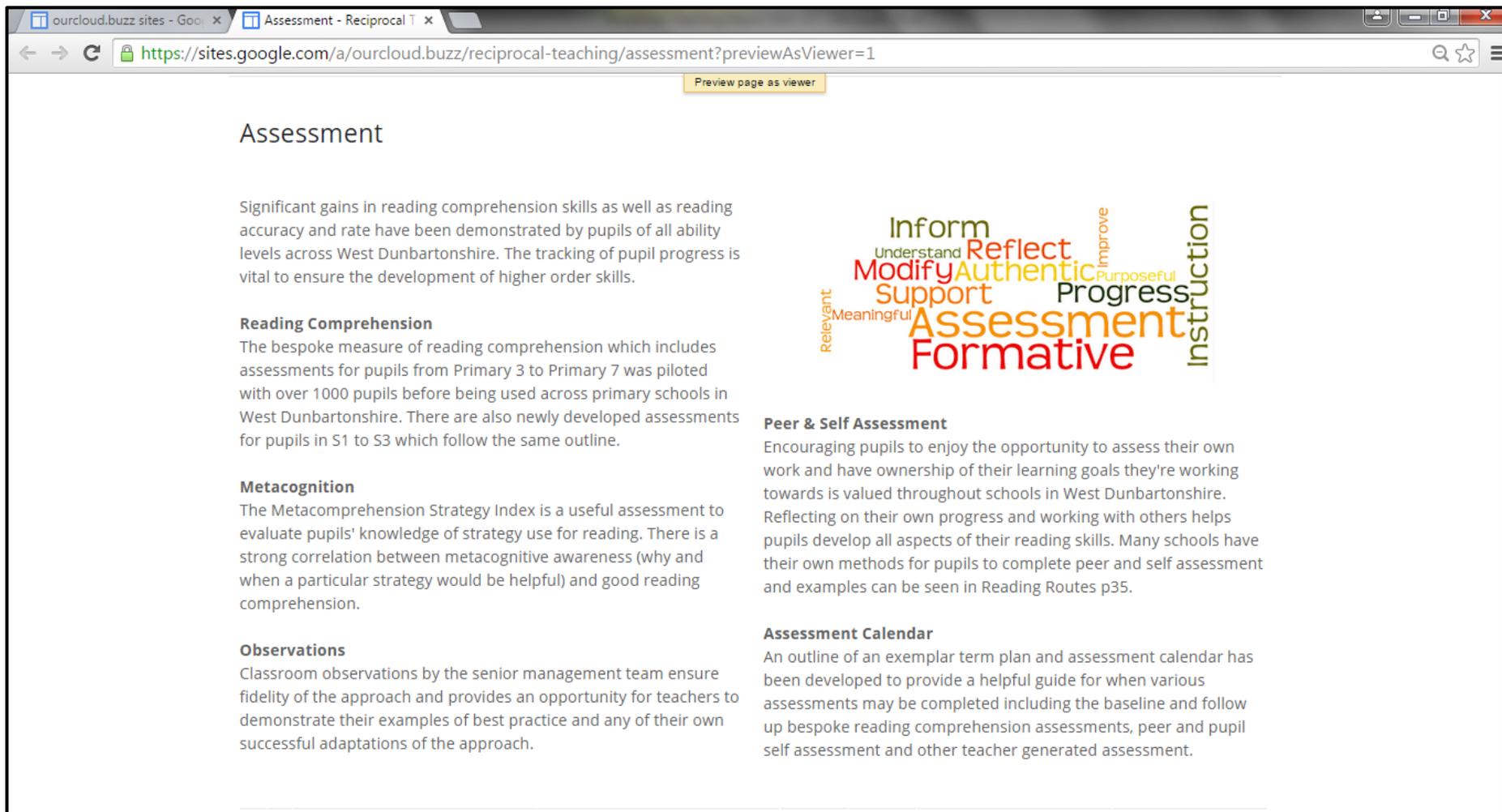
Text Extracts

Across West Dunbartonshire, teaching staff have shared a passage of text they have used and felt was valuable. Each contribution has a text extract and some also have associated worksheets and questions. Information about what strategies and areas of the curriculum the passage was used for have been provided. The age and stage of pupils who used the passage was also specified however, professional judgement about your own class is required. For example, a passage suggested for Primary 5 pupils may be suitable for your Primary 6 class. The extracts have been broadly divided into Early, First and Second Levels.

Thank you to the staff from St Patrick's Primary, St Kessog's Primary, Goldenhill Primary, St Ronan's Primary and St Peter's Primary for sharing their resources.

If you would like to contribute to the resource bank please email an

Appendix 2. Reciprocal Teaching Our Cloud Page Screenshots



The screenshot shows a web browser window with two tabs: 'ourcloud.buzz sites - Google' and 'Assessment - Reciprocal Teaching'. The address bar shows the URL: <https://sites.google.com/a/ourcloud.buzz/reciprocal-teaching/assessment?previewAsViewer=1>. A yellow button labeled 'Preview page as viewer' is visible below the address bar. The main content area is titled 'Assessment' and contains several paragraphs of text, a word cloud, and three sub-sections: 'Reading Comprehension', 'Metacognition', and 'Observations'. The word cloud features terms like 'Assessment', 'Formative', 'Instruction', 'Progress', 'Authentic', 'Support', 'Relevant', 'Meaningful', 'Modify', 'Understand', 'Reflect', 'Improve', and 'Purposeful'. The sub-sections are 'Peer & Self Assessment' and 'Assessment Calendar'.

Assessment

Significant gains in reading comprehension skills as well as reading accuracy and rate have been demonstrated by pupils of all ability levels across West Dunbartonshire. The tracking of pupil progress is vital to ensure the development of higher order skills.

Reading Comprehension

The bespoke measure of reading comprehension which includes assessments for pupils from Primary 3 to Primary 7 was piloted with over 1000 pupils before being used across primary schools in West Dunbartonshire. There are also newly developed assessments for pupils in S1 to S3 which follow the same outline.

Metacognition

The Metacomprehension Strategy Index is a useful assessment to evaluate pupils' knowledge of strategy use for reading. There is a strong correlation between metacognitive awareness (why and when a particular strategy would be helpful) and good reading comprehension.

Observations

Classroom observations by the senior management team ensure fidelity of the approach and provides an opportunity for teachers to demonstrate their examples of best practice and any of their own successful adaptations of the approach.



The word cloud graphic contains the following words: Inform, Understand, Reflect, Improve, Purposeful, Modify, Authentic, Support, Progress, Relevant, Meaningful, Assessment, Formative, and Instruction. The words are arranged in a circular pattern with varying sizes and colors.

Peer & Self Assessment

Encouraging pupils to enjoy the opportunity to assess their own work and have ownership of their learning goals they're working towards is valued throughout schools in West Dunbartonshire. Reflecting on their own progress and working with others helps pupils develop all aspects of their reading skills. Many schools have their own methods for pupils to complete peer and self assessment and examples can be seen in Reading Routes p35.

Assessment Calendar

An outline of an exemplar term plan and assessment calendar has been developed to provide a helpful guide for when various assessments may be completed including the baseline and follow up bespoke reading comprehension assessments, peer and pupil self assessment and other teacher generated assessment.

Appendix 3. Primary Schools contributing Data and Resources

The following schools returned both the baseline and follow up assessment data. In total results from 1845 pupils were submitted by school staff. Samples were taken from this to investigate the impact of this methodology.

Returned data

- **Aitkenbar Primary**
- **Bonhill Primary**
- **Carleith Primary**
- **Clydemuir Primary**
- **Gavinburn Primary**
- **Haldane Primary**
- **St Eunan's Primary**
- **St Joseph's Primary**
- **St Kessog's Primary**
- **St Mary's Primary, Duntocher**
- **St Patrick's Primary**
- **St Peter's Primary**
- **St Ronan's Primary**
- **St Stephen's Primary**

Appendix 4

Contributed resources

The following schools contributed resources.

- **Goldenhill Primary**
- **St Kessog's Primary**
- **St Patrick's Primary**
- **St Peter's Primary**
- **St Ronan's Primary**

Appendix 4. Summary of Head Teacher Survey

Reciprocal Teaching in Primary School

Head Teacher Survey June 2015

In June 2015, Head Teachers were sent a questionnaire focusing on the whole school approach, implementation and parental engagement to allow a precise interpretation of any data they provided and also to give an overview of what stage each school was at allowing accurate planning for the next session.

WHOLE SCHOOL APPROACH

Each of the 27 Head Teachers from the 28 schools who had received the initial training from Psychological Service completed the survey. The first section of the survey was focused on the whole school approach. 96% ($N=26$) of Head Teachers reported that Reciprocal Teaching is included on their School Improvement Plans and 67% ($N=18$) have either a working group or a literacy champion within the school focusing on Reciprocal Teaching. Figure 1 shows the classes which are currently implementing Reciprocal Teaching on a regular basis.

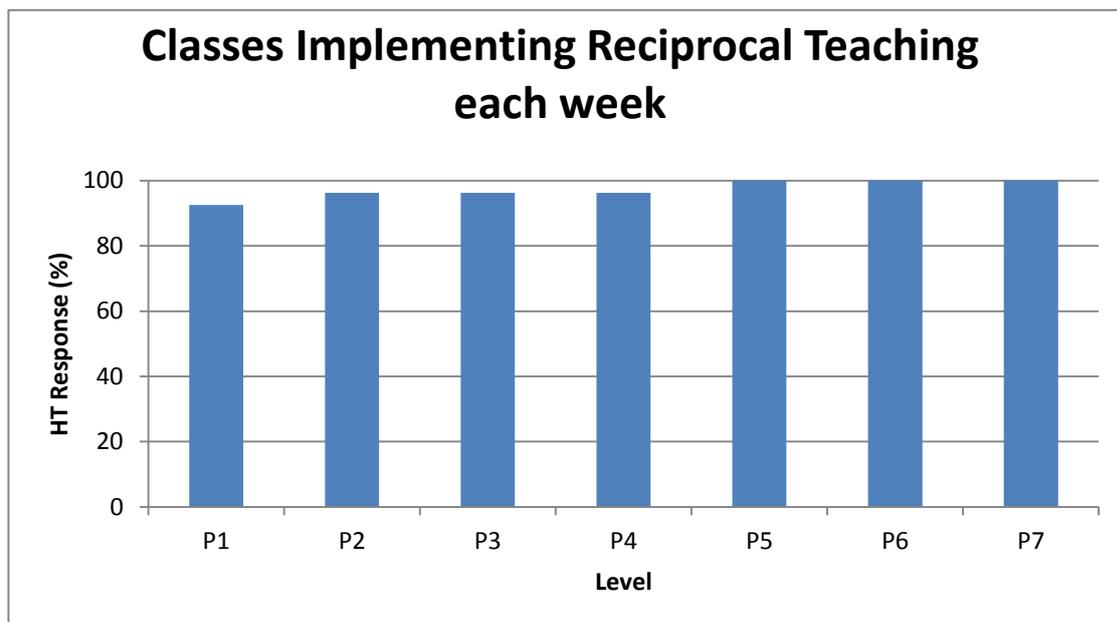


Figure 1. Classes Implementing Reciprocal Teaching.

All of the 28 schools are implementing Reciprocal Teaching in Primary 5 to Primary 7 with 92% ($N=25$) implementing in Primary 1 and 96% ($N=26$) implementing the approach in Primary 2 to Primary 4. The aim would be to ensure that Reciprocal Teaching is being implemented across the school to provide a consistency of approach.

Figure 2 shows the average number of times Reciprocal Teaching is being implemented each week.

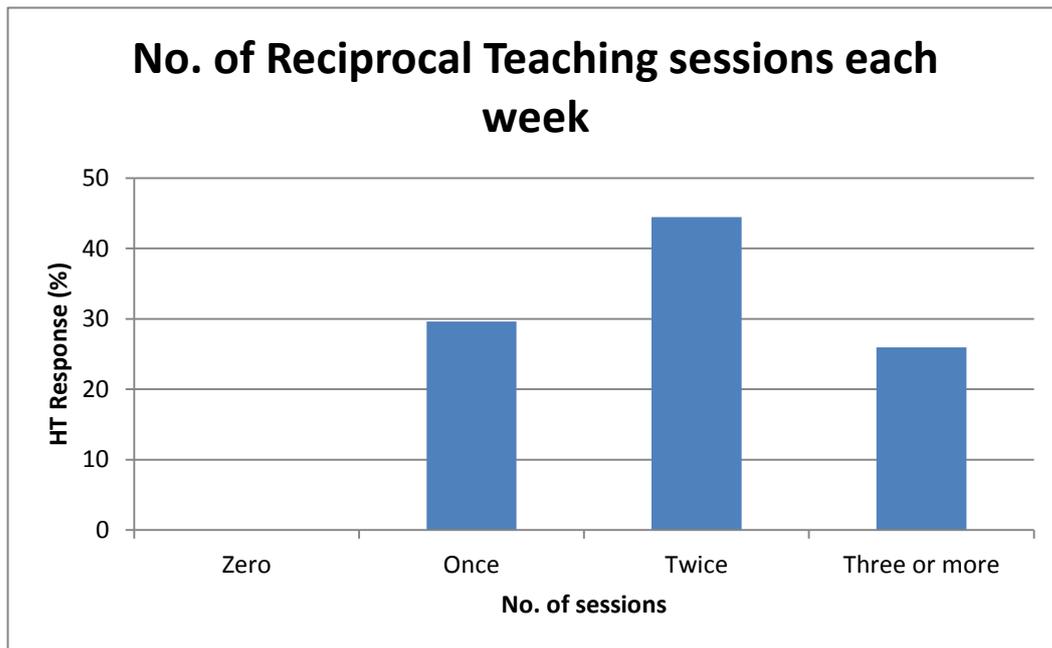


Figure 2. Number of sessions of Reciprocal Teaching each week.

Most schools (70%, $N=19$) are implementing the approach twice per week or more. Previous research has found that implementing Reciprocal Teaching more than once a week improves pupil higher order skill development.

Figure 3 shows the length of an average Reciprocal Teaching session.

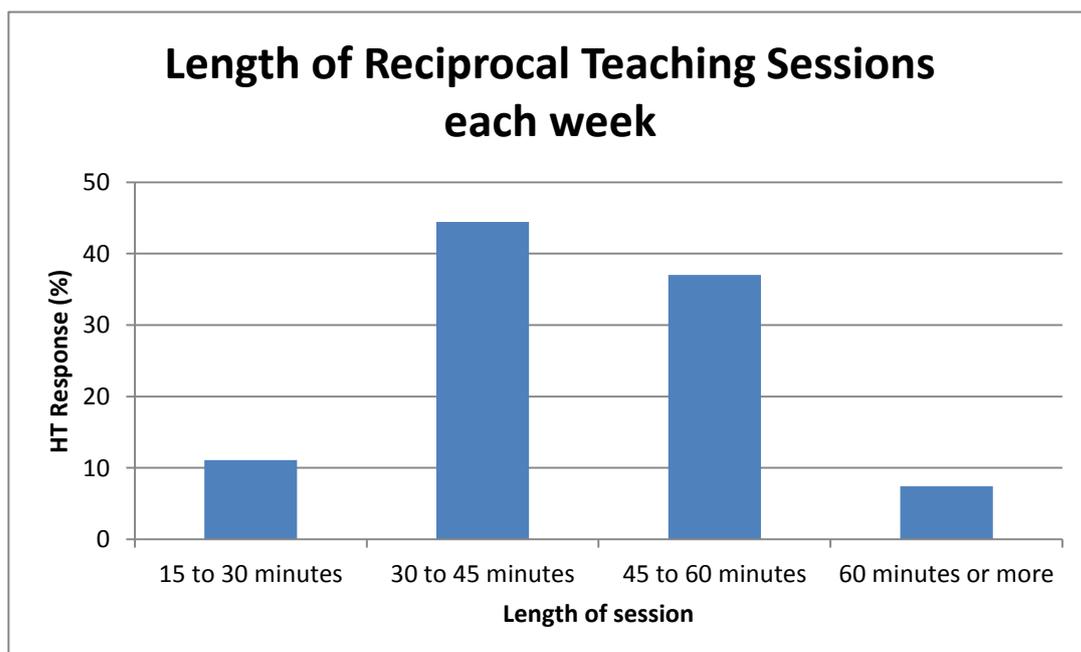


Figure 3. Average length of a Reciprocal Teaching session.

Most frequently a Reciprocal Teaching session has been reported to last between 30 and 45 minutes however, this may be longer in the upper stages of the school. The evidence from the 10 schools which returned data and made the greatest improvements in higher order skills were implementing Reciprocal Teaching for sessions lasting 45 minutes or longer. Therefore, increasing average Reciprocal Teaching lessons to 45 minutes or more will be a suggestion included in future training and discussions with Head Teachers.

Figure 4 shows the length of time that Reciprocal Teaching has been formally implemented.

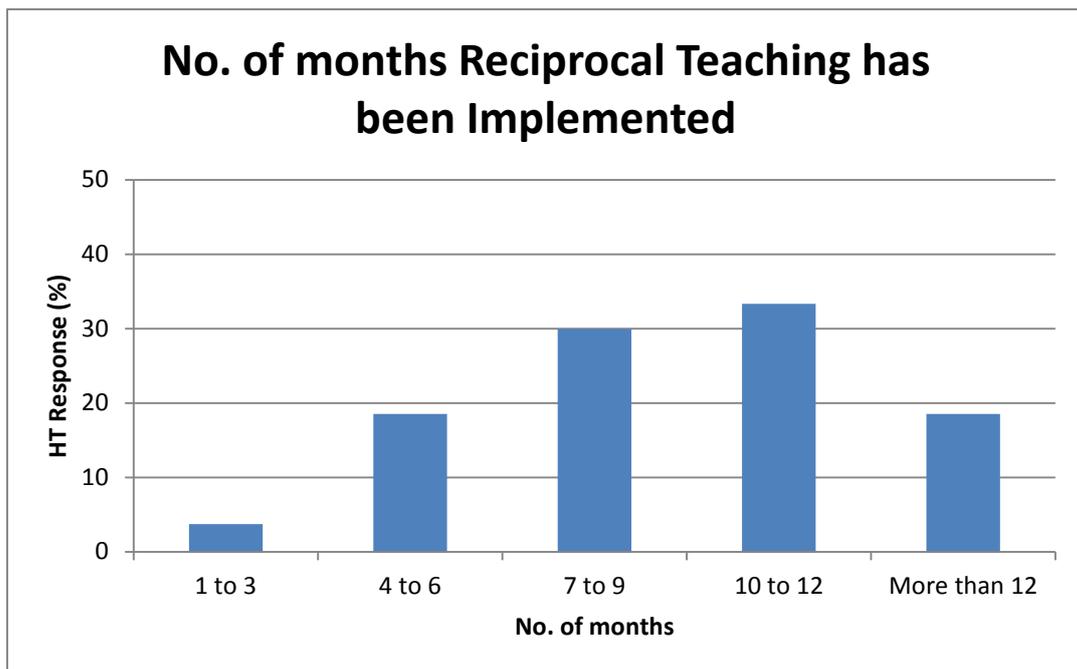


Figure 4. Number of months Reciprocal Teaching has been Implemented.

The average number of months Reciprocal Teaching has been implemented is between 10 and 12 months. This varies due to the time when school staff first received their initial training session.

IMPLEMENTATION

The next section of the questionnaire was focused on the how the Reciprocal Teaching methodology was being implemented. 76% ($N=20$) of Head Teachers reported that teachers have been using the approach in other areas of the curriculum in an interdisciplinary learning manner. The impact is being monitored through the use of a bespoke measure of reading comprehension and most schools have used these over the last year. Head Teacher and Senior Management Team observations are also being carried out and the use of the authority wide GL assessment provides another opportunity to track progress.

Challenges that were suggested by Head Teachers were that staff were taking time finding appropriate text to use with the approach. To overcome this some schools

have bought new resources. There has also been a challenge to ensure consistency across the school due to teachers having different expectations and interpretations of how to lead a Reciprocal Teaching lesson. More collegiate time to share practice and peer observations have been employed to overcome this. Staff confidence with the approach has also been a challenge but Head Teachers feel staff need more time for this to improve and to continue with professional dialogue.

Figure 5 shows Head Teacher reflections on how staff feel about implementing the four foundations of think-alouds, scaffolding, metacognition and cooperative learning.

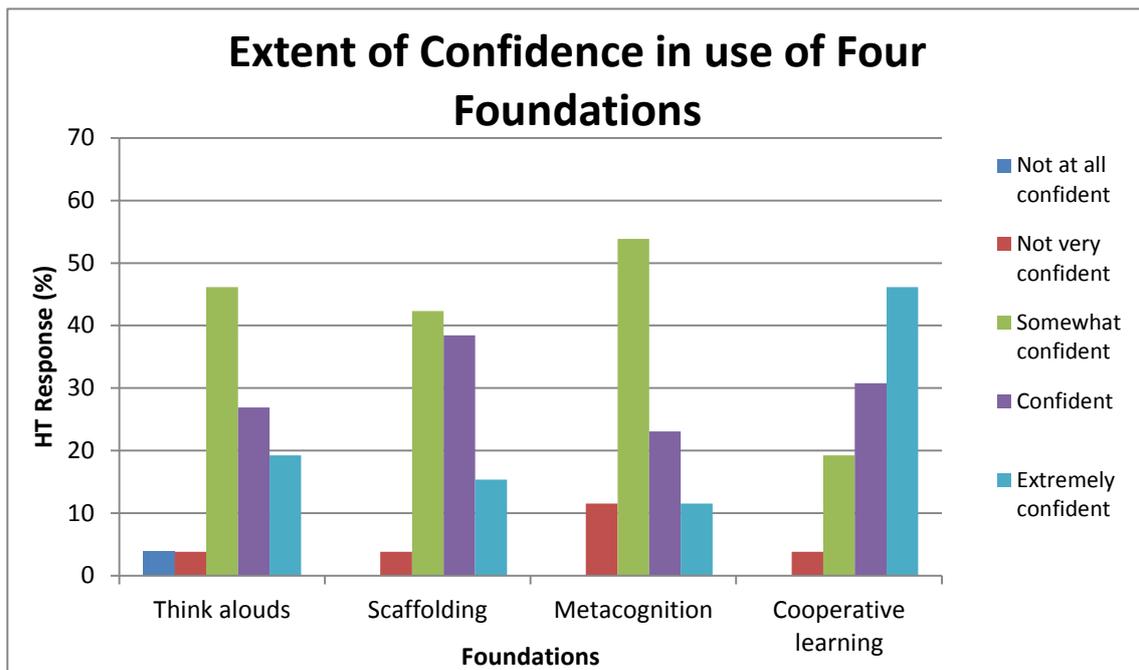


Figure 5. Extent of Teacher Confidence for each of the Four Foundations

Figure 5 shows that staff feel most confident with cooperative learning and less confident with the think-alouds, scaffolding and metacognition. On average, the lowest confidence rating was for metacognition. Head Teachers were asked how they check that staff are using the four foundations in practice and the most common response was through observations. One school has developed a bank of practical metacognition resources to support staff. 96% (N=24) of Head Teachers reported that no adaptations had been made to the core strategies. This is encouraging and provides evidence that the fidelity of the approach is being maintained

All schools that received an initial training session were also provided with an Assessment Pack which included a bespoke measure of reading comprehension for pupils from P3 to P7. Figure 6 shows Head Teacher ratings of how useful these assessments were.

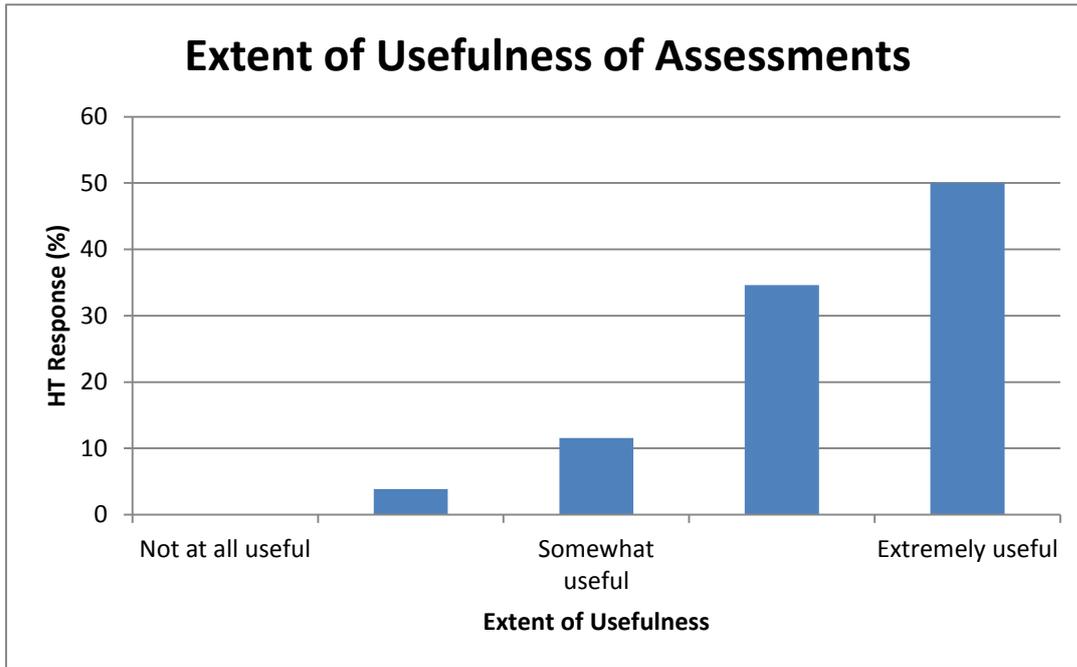


Figure 6. Usefulness of Bespoke assessments.

84% ($N=22$) of Head Teachers found the assessments useful for monitoring progress however, their staff had reported that these were pitched at too difficult a level. Head Teachers felt that the assessments provided statistical evidence for progress across the year rather than just professional judgement and it gave them confidence that the assessments were being used across the authority. Head Teachers also reported that Class Teachers felt the assessments showed where the gaps in children's learning were and the follow up assessment enabled them to judge the successfulness of the implementation of Reciprocal Teaching across the year.

As well as the bespoke measure of reading comprehension, the Metacomprehension Strategy Index was used by 35% ($N=8$) of schools. This was an optional assessment also included in the Assessment Pack and was mostly used with children at Primary 5 to gauge their understanding of why and when a strategy would be useful.

TRAINING AND SUPPORT

During the 2013/14 session, various film clips were recorded to help share practice. Points of discussion were developed related to the film clips and covered a range of topics including practical classroom tools, whole class lessons and introduction of Reciprocal Teaching into Primary One and Two. Figure 7 shows the extent to which the collegiate packs were used.

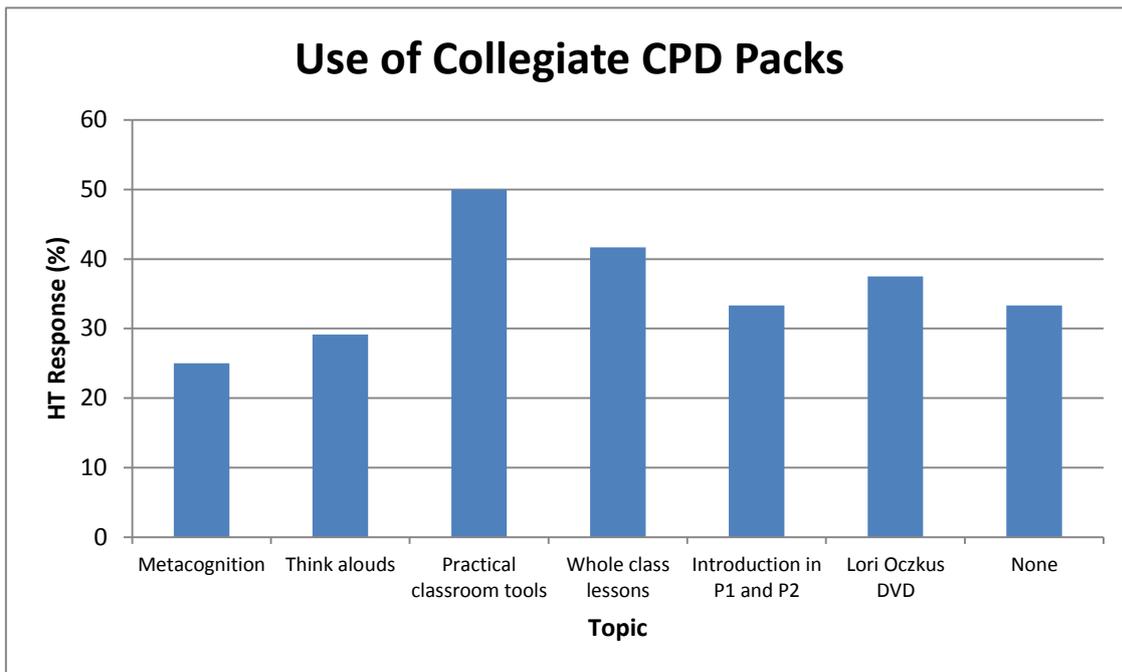


Figure 7. Use of Collegiate Packs

Head Teachers were provided with a 'Practitioner's Guide to Reciprocal Teaching' binder and every Class Teacher that attended the initial training session was provided with a copy. The purpose of this resource was to support practitioners to introduce Reciprocal Teaching and contained practical implementation guidelines, hand outs and worksheets.

Figure 8 shows the Head Teacher ratings for the usefulness of this guide.

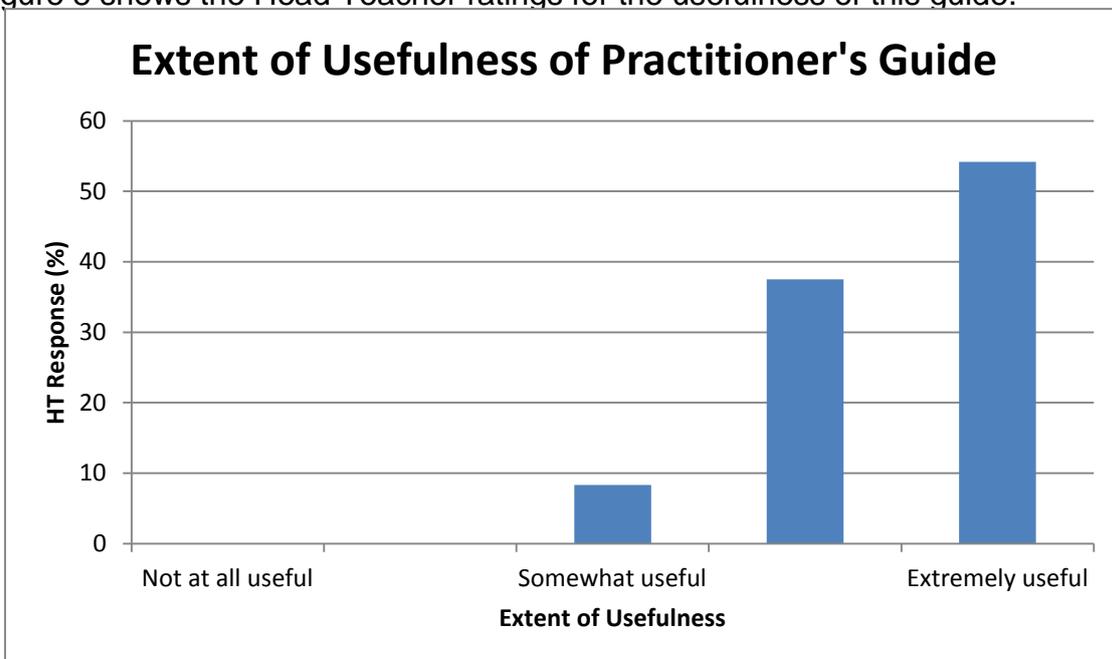


Figure 8. Usefulness of Practitioner's Guide

Figure 8 shows that Head Teacher valued this resource with 92% (N=22) rating it useful.

Head Teachers were also asked what element of practice they would be willing to share with colleagues. A range of practice was mentioned including the use of props and puppets, literacy buddies, use of music and how the approach has been implemented at Early and First level.

54% (N=13) of Head Teachers would like further training and support materials. Most of the comments were regarding the bank of resources which are due to be shared through an online *Our Cloud Reciprocal Teaching page*. Aspects of training which would be helpful include additional advice on metacognition and any associated materials as well as observing other teachers in action. The new *Our Cloud page* will share a variety of video clips from the Early Years through to Secondary and may offer some support.

PARENTAL ENGAGEMENT

Head Teacher were asked about any workshops, talks and leaflets given to parents about Reciprocal Teaching in an effort to gauge parental response to the approach and whether this led to engagement with their child's learning.

Figure 9 shows whether these activities had been tried or not.

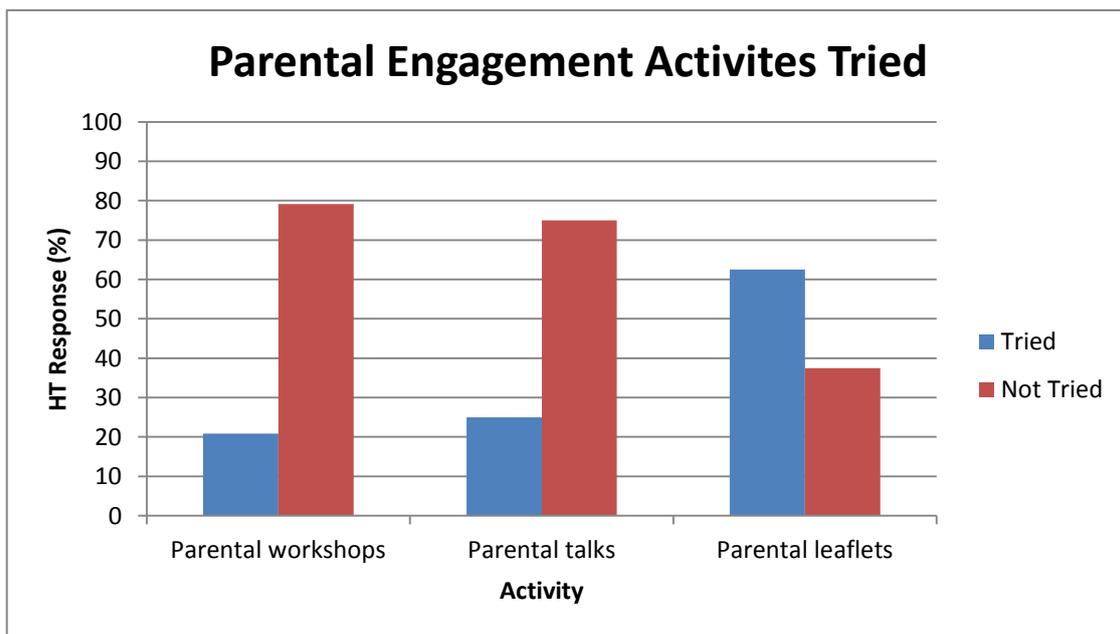


Figure 9. Parental Engagement Activities

21% (N=5) of schools had offered parental workshops. From this feedback had been very positive and had increased confidence of supporting their child's learning at home. Other schools had plans to run workshops in the next academic year. 25% (N=6) of schools had offered parental talks and parents had enjoyed using resources and reported they felt clearer about how they can help their child at home with reading. In the Practitioners Guide, two versions of leaflets for parents had been created and 63% (N=15) of schools have handed these out to parents. One school

also used bookmarks from the Practitioners Guide and sent these home with the leaflets to support parents at home.

Other strategies used to engage parents included discussion at parent's evenings and termly newsletters which incorporated Reciprocal Teaching. One school has a parents group looking at a novel study assisting with art work and activities to share with parents and children.

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