

**The effectiveness of reciprocal reading as an intervention for underachieving children**

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**Abstract**

The purpose of this study was to focus on the area of reciprocal reading which aims to improve reading comprehension through the use of four reading strategies: predicting, questioning, clarifying and summarising. The author researched the effectiveness of reciprocal reading as an intervention strategy on pupils who were identified by the class teacher as underachieving. A six week intervention programme using reciprocal reading was implemented in an attempt to impact on pupil's comprehension and engagement with text. The findings explore the effectiveness of the intervention programme.

**Introduction**

The primary purpose of this study is to address the effectiveness of reciprocal reading as an intervention strategy in combatting underachievement in children's comprehension. I will address the:

1. Issue of underachievement
2. Motivation and engagement of pupils with regards reading
3. Effectiveness of Reciprocal reading as an intervention strategy.

In 2011 the Minister of Education stated that growing the economy is a top priority for the Executive and that in order to do this we require a well-educated workforce (DE, 2011). However in order to achieve this DENI (2011) have identified the need to raise standards in literacy and numeracy, as they are both the key drivers in ensuring future growth of our economy and "vital to the success of our children, as they progress through school and work and life". (DE, 2011) To help bring a renewed focus to the importance of literacy and numeracy, DENI developed the strategy "Count, Read: Succeed" (DE, 2011). Although this policy highlighted that "our education system has many strengths" (2011) it also addressed the fact that a significant trend still remains: the performance gap between our highest and lowest achievers.

The Department of Education state underachievement is when "performance is below what is expected, based on ability" (DE, 2011, p.4). They highlight how "Currently around 20% of those leaving primary schools are performing below the expected level in literacy and numeracy" (2011, p.7). The Chief Inspector's 2012 report highlights that whilst end of key stage results in literacy and numeracy are improving and showing an upward trend; one in five children are still not reaching the expected outcomes (ETI, p. 48). She concludes that this is "not good enough" (p.7, 2012) and urgent action is necessary.

Therefore the Department of Education has proposed several targets for the end of key stage assessment with the intention to raise educational standards. It is the aim that by the end of key

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stage two in 2019/20 that 90%+ of pupils will achieve a level 4 in communication. Furthermore she concluded that the development of reading in all key stages become a key area for improvement. She highlights that " children should acquire a broad range of reading strategies such as re-reading and using syntax, contextual, and visual cues to aid self-correction" (DE, 2012, p. 47) However, due to the current economic climate, it is extremely difficult to draw value for money conclusions on interventions in this area, hence the need to implement timely cost effective intervention; namely the application of good practise (NIAO, 2013).

In light of this, I will be exploring reciprocal reading as an intervention strategy and whether or not it is effective in tackling underachievement with an identified group of children.

"Reciprocal reading is a process involving four distinct activities (questioning, clarifying, summarizing and predicting)" (Cooper and Grieve, 2009). It was first described by Palincsar and Brown (1984) as: *a procedure.. where teacher and student took turns leading dialogue concerning sections of a text. Initially the teacher modelled the key activities and the students were encouraged to participate at whatever level they could. The teacher could then provide guidance and feedback at the appropriate level for each student* (Palincsar and Brown, 1984, p.124).

The reasons for choosing to focus on just these four strategies are because they are regarded to be both "comprehension fostering and comprehension monitoring" (Palincsar and Brown, 1984, p. 121).

Throughout my study I will explore the effects of reciprocal reading as a method of improving children's reading comprehension. The research questions I will investigate are:

1. What are the cognitive skills children need to be secure with, in order to understand text?
2. What impact does the teaching of RR strategies have on children's metacognition and self-efficacy?
3. What strategies/classroom approaches are effective in ensuring that RR has a positive impact on pupil's engagement with and understanding of text?
4. How effective is RR as an intervention to impact on underachieving pupils?
- 5.

## **Literature Review**

### *Comprehension*

There has been much debate regarding the definition of reading comprehension as many hold differing views on its nature. Snow (2002) recognises the complexity of comprehension and defines it as a "process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (2002, p.11). In light of this I will explore two different models of comprehension; the Simple View of Reading and the Construction- Integration model and the areas which they consider important.

The Simple View of Reading (SVR) first outlined by Gough and Tunmer (1986, as cited by Dombey 2009) concludes that reading is a product made up of two variables; language comprehension and word recognition both of which are equally important.

Figure 1: The Simple View of Reading (Source: DfES, 2006, p. 53)

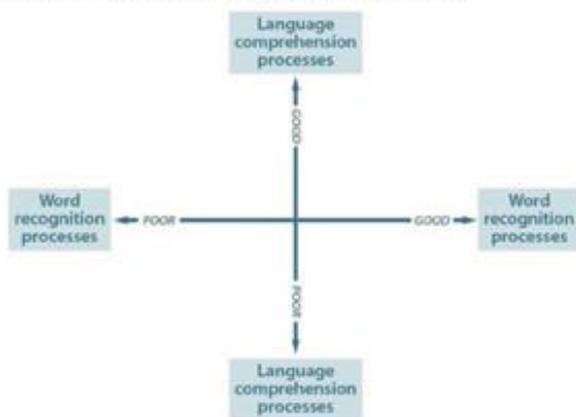


Figure 1.

However, Perfetti et al (1996) claims that should decoding be slow then comprehension will also be poor as the cognitive resources are utilised on decoding leaving little resources left to attend to language comprehension . He describes this as "decoding bottleneck" (Tennant, 2015, p.8). In other words if children are committing excessive effort to deciphering words then there is little cognitive space remaining to devote to comprehension. This argument was adopted by the Rose Report (2006) and formed a central part of the primary National strategy's view of how reading is learned and should be taught, hence the recommendation that children be explicitly taught phonics daily to avoid decoding bottleneck. The SVR model suggests that the reading process and understanding of pupils needs is more complex than this and teachers need to understand the four quadrants presented in the SVR in order to inform the strategies and approaches used when teaching reading.

Another more favourable model is the Construction- Integration model (Graesser, 2007). Like the SVR it recognises decoding as essential to comprehend a text but stresses that prior knowledge and experience of the reader are equally important. This is exemplified by Harrison and Perry (2004) who attest both are necessary to interpret a text. In light of this model then it is clear that comprehension is a most complex skill requiring the use of a variety of cognitive processes. Tennant (2015) divides these processes into three broad domain areas.

1. Linguistic processes such as vocabulary and syntax
2. Knowledge factors which encompasses general knowledge and domain knowledge.
3. Metacognitive processes which includes, memory, inference making and comprehension monitoring.(Tennant, 2015, p.32).

<b>Emerging themes</b>	<b>Pupil Cognition</b> Background knowledge Word recognition and knowledge of text Knowledge and application of strategies
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*Underachievement in Northern Ireland*

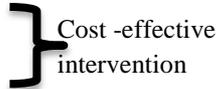
Having established the key processes that support comprehension one must now explore the issue of underachievement in this area and reasons behind it. Perry (2012) identified several factors which contribute to underachievement in our schools, these range from socio-economic background to

attendance at school. In light of this the NI assembly (Perry, 2012) identifies three key factors which are considered to have the greatest influence on underachievement:

- Early intervention
- Classroom teaching
- School leadership
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Perry regards classroom teaching as having “the greatest impact on student outcomes” (2012, P.16) Mc Kinsey and Company (as cited in Perry, 2007) concur with this and particularly emphasise the importance of the teacher in this area. Therefore, this stresses the need for schools to ensure that they select the right people to become teachers, those who are effective instructors and put in place systems and targeted support for their students in order to develop positive interdependence, individual accountability (Perry, 2012, P.17)

In relation to early intervention NIAO (2013) stresses the difficulty in drawing value for money with regards to literacy and numeracy interventions in terms of expenditure per pupil outcome. It claims that the “Department deliberately does not approach raising standards of literacy and numeracy across schools by ring fencing funding” (NIAO, 2013, P. 13). In light of this the NI Assembly identify some ways of improving achievement that are all low cost. These include: effective feedback which is used to refocus teachers or learners on achieving learning goals, it is regarded as having a very high impact for a low cost. As well as this there is the use of collaborative learning namely peer tutoring “whereby learners teach each other.” (Perry, 2012, P.21) This requires the pupils working in pairs or in small groups and providing each other with teaching support. Again it is regarded as having a high impact for a low cost.

<b>Emerging themes</b>	<p><b>Social Interaction in tackling underachievement</b></p> <p>Teacher knowledge of effective instruction</p> <p>Effective feedback</p> <p>Peer tutoring and co-operative learning</p> <p>Individual accountability and positive interdependence</p>	 <p>Cost-effective intervention</p>
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*Underachievement and comprehension*

With regards comprehension, there are many possible reasons why children might be underachieving. Mokhtari and Reichard, (2002) begin by addressing the issue of decoding as a possible reason, they claim that by placing emphasis on single words, a beginning reader may fail to focus on understanding phrases and sentences which ultimately leads to mistakes in accuracy. Garner (1981) felt that this issue could be connected to an over reliance on narrow instruction in reading. However Applegate et al. (2009) completed a study which investigated the relationship between fluency and comprehension. In their study, out of 171 children, all of which were considered to be fluent readers (read quickly, accurately and with expression) 57 struggled with text comprehension; therefore highlighting that underachievement in reading cannot be restricted to just poor decoding skills. Tennant (2015) confirms this and stresses that “1 in 10 children in an English classroom” are likely to be underachieving in comprehension (2015, p. 33). He concludes that such results could be due to many factors, for example a child’s self-efficacy.

Henk and Melnick (1995) identify the way individuals feel about themselves as readers as a key factor in determining underachievement. Cremin (2007) highlights that because children have different reasons for reading they need to encounter texts which are of a particular interest to them so as to inspire them to read. He therefore suggests that teachers find out about their children’s reading preferences and use this to create stimulating contexts and activities for them.

Furthermore, research carried out by the UKLA (2010) identified another reason why children may be underachieving in reading, namely that there was little or no teaching of comprehension. They stress that a more balanced approach was required to the teaching of reading comprehension: “as well as working to master the mechanics of reading that allow them to lift the words off the page, children are encouraged and supported to focus on making sense of written text.” In order to do this Cremin (2009) identifies the centrality of discussion and thinking out loud during reading time. She addresses how often talk is given a lower status than reading and writing, and that responding to a text orally is not perceived as a legitimate literacy activity because it does not look like work. However, she claims that by incorporating this style of practice in a classroom the teacher sends a clear message to the children that their oral contributions are valued and this subsequently raises the profile of talk in the children’s eyes’. In turn, this promotes the development of comprehension while making reading more enjoyable for the children.

Furthermore in relation to comprehension instruction they stressed that mentioning comprehension strategies is not enough, children certainly need explicit teaching in these techniques. (UKLA, 2010, P.13) Dole et al (2009) concurs and stresses the importance of teaching explicit metacognitive strategies which “allow children to monitor and assess their ongoing performance in accomplishing a cognitive task” (2009, p.349).

<p><b>Emerging themes</b></p>	<p><b>Importance of metacognition and self-efficacy</b>                  Explicit teaching of comprehension strategies                  Pupil interests                  Conscious reflection on strategy use                  Thinking out loud</p>
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***Reciprocal Reading***

Palincsar and Brown (1984) define Reciprocal Reading (RR) as an instructional method aimed to combine explicit comprehension instruction with metacognitive awareness. It was initially introduced in the United States in an attempt to improve reading comprehension in poor comprehenders and proved most influential gaining recommendation from the NICHD (2000) as “an effective practice that improves students reading comprehension” (as cited in Oczkus, 2010, p.2). Furthermore, in the UK, RR has also received positive reviews; it was recommended as a way to improve comprehension in a primary National Strategy Guidance for teachers entitled *Understanding reading comprehension* (Department for Education and Skills, 2005)

Nonetheless despite such reviews there is little evidence to prove it is being used in the UK. The Every Child A Reader (Tanner et al, 2011) programme places a huge amount of emphasis on the Reading Recovery programme and in particular the teaching of systematic phonics as recommended in the Rose Report (2006). Yet as studies show “Successful decoding alone is insufficient to ensure that readers understand text “(Cooper and Grieve, 2009). In light of this, there would appear to be an anomaly in terms of the disconnect between research findings regarding effectiveness of RR and widespread practice. Given that the reviews of Reciprocal Reading are positive it is interesting to explore why they are positive and what makes RR so effective.

***Content***

As previously addressed RR is made up of four strategies which “good readers use together to comprehend text” (Oczkus, 2010, p.16). Each strategy is considered equally important in the comprehension process and are most effective when used in a package rather than separately.

Strategy	Description
Predicting	Requires the reader to hypothesise about what the writer might talk about next in the text. Assists the student in “setting a purpose for reading” by recalling what they already know about the topic. (Oczkus, 2010) Takes place throughout reading.
Questioning	Increases reading comprehension because when children “know they have to think of a question they often read with more awareness of the texts important ideas” (Oczkus, 2010, p.19). Many types of questions that students should be encouraged to use, such as quiz questions and discussion questions. (Oczkus, 2010)
Clarifying	Helps students monitor their own comprehension as they identify problems such as words they are unsure of or sentences, passages or ideas. Encourages them to explore strategies which will help them when such problems occur, such as reread, discuss with your partner etc
Summarising	It is a challenging strategy that involves the use of several key skills such as “determining important points and arranging them in a logical order” (Oczkus, 2010, p. 22). Requires the children to paraphrase in order to ensure they understand what is happening in the text.

Figure. 2.

### Method

Although the four strategies are paramount in RR, Oczkus (2010) explains that the teaching instruction is what ultimately makes it a success. These include:

Cooperative learning: Vygotsky (1978) stated that children learn best when in collaboration with practitioners. It is in this type of setting that teachers and pupils work together to find meaning in a text, therefore no one should have all the answers. Kagan 1989 (as cited in Oczkus, 2010) stresses that “cooperative learning needs to encompass positive interdependence, individual accountability, equal participation and simultaneous interaction” Garner (1992) concurs and states that this is essential as it paves the way for the children to share their own experiences and insights which also has a profound impact on pupil motivation. Furthermore in light of cooperative learning Oczkus (2010) states it should be a discussion process, she claims that the thinking out loud process will help increase children’s metacognition which is an essential part of RR because “it helps students learn to consciously think about and reflect on their strategy use.” (Oczkus, 2010, p.33)

Role of the Teacher: Vygotsky (1978) outlined that children learn best with the assistance of expert practitioners. He stated that at first the child should observe the teacher and then begin to take some responsibility for the work under the guidance of the teacher until eventually they can complete the task independently. This gradual transition towards total independence stems from the Vygotskian Zone of Proximal Development (1978) which he argued would stimulate the most meaningful learning. This type of approach is embodied within Bruner’s “scaffolding” metaphor (1978). This involves giving the child support which is adapted as the child’s needs change. Pearson and Fielding (1991) conclude that it is essential that the level of scaffolding is adapted accordingly as too little scaffolding can lead the child to become unmotivated, similarly, too much can cause the child to become bored.

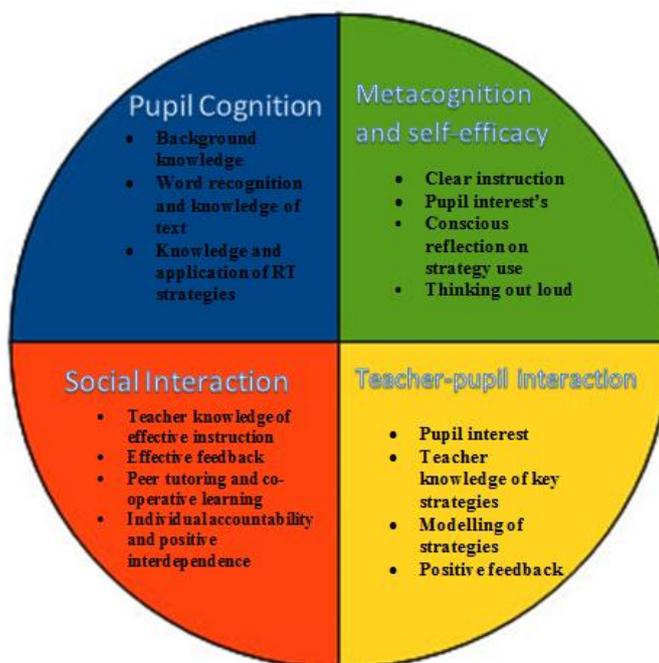
Furthermore the teacher is also hugely influential in modelling the strategies; this includes reading aloud and demonstrating a love of reading. Miller (2002, p. 55) states “you are the model. What you say and how you say it becomes what they say and how they say it”. Not only does modelling give the children an insight into how to apply the strategies it also helps develop their metacognitive skills with regards to how the strategies are effective, this is essential when they begin to work independently.

**Motivation:** There are many ways in which children can be motivated to read. The first of which is supported by the UKLA is that “children can only become effective and committed readers through reading texts that interest them.” (2010, P.13) They believe that a large variety of classroom reading materials is necessary to developing pupil motivation; this is because children enjoy reading books which relate to their personal interests. In light of this then it is essential that the voice of the pupil is taken into consideration when selecting books. Furthermore, another important aspect is children’s self-efficacy which relates to their own self-belief, which determines their future goals and tasks. Bandura (1995) highlights that the major influences on this include; how well they have done in a similar activity and the feedback they received from others and argues that task-specific comments about pupils’ success help them attribute success to learnable strategies which can develop a child’s self-efficacy.

<p><b>Emerging themes</b></p>	<p><b>Teacher and pupil interaction</b>                  Pupil Interest                  Teacher knowledge of key strategies                  Modelling of strategies                  Positive feedback</p>
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*Conclusion*

The key themes emerging within this literature review include:



**Research Methodology**

*Types of research*

Research is a “systematic process of collecting and analysing information for some purpose” (McMillan and Schumacher, 1997). With regards to educational research Wiersma and Jurs (2005)

address two key types which are “useful for enhancing the effectiveness and efficiency by which research is conducted” (2005, p.10). These are qualitative and quantitative research.

Quantitative research is a logical, numerical and data-led approach which is done to determine relationships, effects and causes. (Muijs, 2004) Qualitative research however is research with uses non-numerical data and encompasses a wide range of methods, including, observation and interviewing (Layder, 2013).

*Design of study*

For the purpose of this study I adopted an action research style as well as a mixed method approach in order to fully explore the topic of Reciprocal Reading and whether it is an effective intervention strategy.

*Action research*

Zuber-Skerritt (1996) defines action research as a critical and collaborative inquiry by reflective practitioners which seeks to improve and understand the world by changing it and learning from the consequences of the changes. As this research is of a practical, classroom based nature it was evident that action research was the most appropriate type of research to adopt.

With regards to the procedures for effective action research, I adopted Lewin’s four stage model (1946):

• Planning	I selected a text prior to each session and read it ensuring I was familiar with it and able to model the RR strategies accordingly.
• Acting	In the early stages of the programme I required props for the RR sessions as I modelled how the strategies help us when we read.
• Observing	I observed the children during the sessions both in term of their use of the strategies and enthusiasm. I also assessed their metacognitive abilities.
• Reflecting	In light of the observations I assessed what was working well and what wasn’t and planned the next session accordingly.

Cohen et al (2005) refers to this procedure as powerful and it addresses the essential role of feedback within each cycle as it facilitates reflection.

*Ethical Considerations*

Prior to conducting the research I sought permission from the school principal, literacy co-ordinator and class teacher making them each aware of the methods which would be used during the research. Furthermore, as the research would involve children I ensured I received written consent from them and from their parents. Brown and Dowling (2010) outlines the importance of correspondence between researcher and participants and states that all “research staff and subjects must be informed fully about the purpose, methods and intended possible uses of the research” During RR sessions I ensured they took place in the classroom with the class-teacher in situ.

In light of issues discussed during the research project, participants were informed that confidentiality would be maintained at all times during the research process. Bell (2010) stresses that the confidentiality of information supplied by research subjects and the anonymity of respondents must be respected at all times, therefore I ensured that participants were clear that comments would be anonymous and remain confidential. In cases where sessions were recorded, participants were reminded that data would be destroyed after transcription and analysis.

#### *Data collection*

Standardised data was analysed in order to identify those children who were underachieving. Therefore this research adopted a mixed method approach, Cohen et al (2007) state that the multi-method approach can add richness and justifies the findings due to the different perspectives offered.

#### *Pupil attitude questionnaire*

A questionnaire is a widely used and useful instrument for collecting information by asking a set of pre- formulated questions. One advantage of using a questionnaire is that all respondents can be guaranteed anonymity. Furthermore, questionnaires allow large amounts of data be gathered at a reasonably low cost. Based on the information gathered in the literature it was clear that a love of reading was essential to being able to comprehend a text, therefore I decided to explore the focus group's attitude to reading prior to beginning the RR programme.

#### *Design of the questionnaire*

I decided to use a questionnaire designed by Kear (2012) which was used by the International Reading Association to assess the reading attitudes of primary school pupils. This questionnaire used few verbal items but rather makes use of visual information which ensured it was attractive and interesting for participants (Cohen et al, 2007). It also incorporated a rating scale style which ensured the categories were discrete and exhausted the range of possible responses which the participants might give. Finally there was adequate spacing between each question to help me when analysing the responses.

#### *Distribution of the questionnaire*

Due to time constraints I decided to trial the questionnaire on a group of colleagues as opposed to piloting it on the students. Based on the feedback I decided to further amend some of the wording in the questions and adapt some of the answers e.g. "ho hum" became not interested. I also added written instructions to the beginning of the questionnaire.

Once consent was granted I administered the questionnaire personally in order to explain the purpose of the study. Bell (2010) states that by doing this you are "likely to get better co-operation and establish personal contact", furthermore it allowed me to discuss confidentiality and anonymity to the participants.

#### *Pre/Post Intervention testing*

Cohen et al (2007) regard testing as a powerful method of data collection particularly as the field of testing is so vast. For this study I wished to assess the students' competences prior to beginning the RR programme and gain an insight into what may be causing them to underachieve in light of issues identified in the literature: namely children's self-efficacy or lack of instruction with regards how to comprehend a text.

#### *Form and content of test*

The test was administered pre and post intervention with each response being awarded one mark. Gronlund and Linn (1990) define this type of testing as placement testing as it strives to identify starting abilities of students and measure the "value added component", which in this case was the RR programme (Cohen et al, 2007, p.418).

Form	It took a written form; instruction was provided for each section separately to avoid over loading students with too much information, as well as this, the text was on a separate page from the questions. Furthermore, I decided not to impose a time constraint as it was unnecessary pressure and took away from the purpose of the test
Content	Pupils were given a short extract from a well-known children's novel and were asked to read the text and answer ten questions, five of which were multiple choice. The task was introduced by the researcher who explained that its purpose was to check their comprehension skills. I explained that in order for them to obtain the mark they would need to select the correct answer in the first section and write a short response in the second section. The children were asked to complete this task independently and were clear that there was just one answer per question.

### *Observation of pupils*

Observation offers the investigator an opportunity to gather live data from naturally occurring social situations which in turn offers more valid and authentic data (Cohen et al, 2007). With regards to this study I wished to observe the participants during the RR sessions and reflect on what methods made RR successful and whether they were similar to those addressed in the literature. I opted for an unstructured observation approach which Cohen et al (2007) define as honest to the situation. With regards to the degree of participation, I adopted the observer as participant role and therefore made known to the group that I was a researcher; this type of observation is useful in studying small groups over short periods of time, which is the case with this project. (Cohen et al, 2007) In this role I observed how the pupils responded to the RR methods over six weeks.

### *Structure of observation*

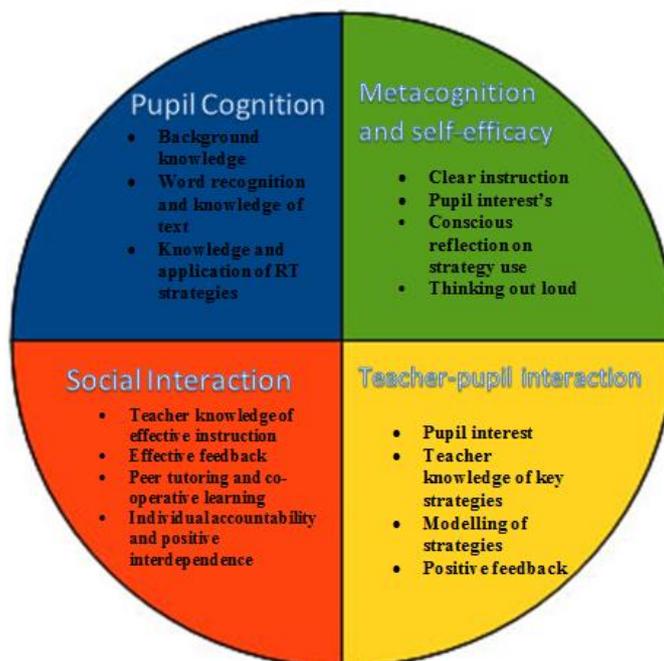
The observations were conducted twice a week during each of the RR sessions over the six week programme; they were carried out in the school setting as it was most suited to the nature of the study. I opted for the Kirk and Miller (1986) observation approach, which involved writing down details during the observations in a field note format. To avoid missing aspects of the sessions she used an audio recording device. The observer then expanded these notes adding them to a record of weekly analyses. In order to avoid the work becoming biased I recorded each observation in the same format which in this case was audio recording and situ notes, furthermore I ensured that the observations were written up at the end of each session.

## **Results and Analysis**

### *Introduction*

This purpose of this chapter is to present the collected data with clarity and accuracy. The results are reported in the four main themes which arose from the review of literature (see figure 1). These themes stemmed directly from the research questions:

1. What are the cognitive skills children need to be secure with, in order to understand text?
2. What impact does the teaching of RR strategies have on children's metacognition and self-efficacy?
3. What strategies/classroom approaches are effective in ensuring that RR has a positive impact on pupil's engagement with and understanding of text?
4. How effective is RR as an intervention to impact on underachieving pupils?



**Figure 1.**

In these four sections I will present and analyse the data gathered based on my three research methods. Quantitative results are displayed through a variety of charts and will be recorded via statistics. Qualitative data has been obtained from the transcription of observations and will be presented in coloured boxes to correlate with figure 1.

### **Pupil Cognition**

Observations

*“To be a good reader you have to know the words, if you’re not sure you need to sound it out and keep practising” – Child A*

Figure 2

At the beginning of the first Reciprocal Reading session, I asked the children what makes a good reader. The response of Child A (see figure 2) highlights an earlier issue identified in the literature by Garner (1981) which concludes that underachievement in comprehension could be connected to an over reliance on narrow instruction in reading in particular the area of decoding and word recognition.

As the intervention programme progressed the children became aware that reading required more skills than decoding, they became particularly confident with regards applying their background knowledge and inference skills, as evident in fig. 3.

Following on from this I explained to the children that today we were beginning a new book based on the World War and London. I asked the children to think about what they already know about the World War and how it affected people in London. One child stated how his Grandfather had to leave his house and move to the countryside and that many children in London might have had to the same as the cities were a target.

Figure 3

Furthermore, Tennant (2015) addresses the importance of metacognitive processes application of the key strategies. It is clear from figure 4 and 5 how the children's knowledge and application of the strategies developed throughout the course of the intervention programme.

For prediction they stated that it was telling what would happen in the future or guessing. One participant said he predicts the score in the football. In order to avoid the children viewing prediction as guessing I asked them what they have to do when predicting a story. They stated that sometimes it is useful to look at the pictures.

Figure 4

When predicting the children were able to look at the pictures and scan the first page in order to make a suggestion of what they thought the chapter would be about. They talked about their predictions confidently using their background knowledge of the topic. They also enjoyed comparing and contrasting their suggestions with their friends.

Figure 5

### ***Metacognition and self-efficacy***

#### Questionnaire

Henk and Melnick (1995) (as highlighted in the literature), identify that the way individuals feel about themselves as readers is a key factor in determining underachievement in reading comprehension. Interestingly, three out of five children stated they did not like reading out loud in class (see figure 6) This suggests that perhaps the children lack confidence in reading which in turn is effecting their self-efficacy in reading.

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18. How do you feel when you read out loud in class?

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Love it!



Like it.



Not interested



Don't like it!

Figure 6.

#### Unseen Test

This lack of motivation and self-efficacy was further highlighted via the comments expressed during their pre- intervention test. (See figure 7)

Child A: I can't do this.

Child B: Will we be doing this every week?

Figure 7

Comments such as these highlight just how much self-efficacy can affect performance in reading. Cremin (2007) (as highlighted in the literature) suggests that low self-efficacy is a contributing factor

in underachievement in comprehension. In light of this he stresses the need to find out about their children's reading preferences and use this to create stimulating activities for them.

These results prompted me to incorporate three key strategies identified in my review of literature which seek to develop a child's self-efficacy. Firstly, the importance of feedback which comments on pupils 'success as highlighted by Bandura (1995) Secondly, the value of providing children with texts that interest them in order to develop pupil motivation and enjoyment of reading (UKLA, 2010) and thirdly the centrality of discussion and thinking out loud during reading time (Cremin,2009) In light of these strategies it soon became evident just how effective they proved in developing the children's attitude to reading particularly because the children felt that all their contributions were valued and therefore more willing to try. (See figure 8)

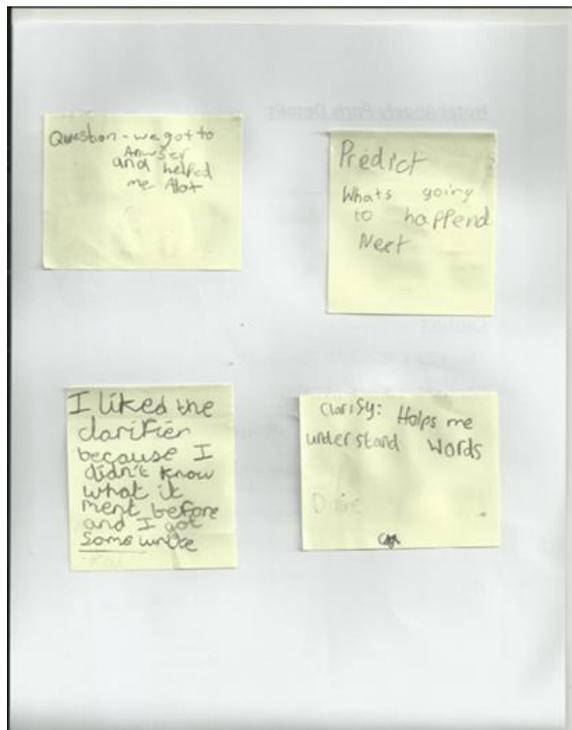
As we began the next section two pupils asked if they could read it, I was glad to see them show an interest.

Figure 8

Furthermore during the pre-intervention test pupils needed significant encouragement from the teacher to complete the task whilst post interventions attitudes demonstrated greater engagement and willingness highlighting an increase in stamina and resilience.

#### Observations

The UKLA (2010) (as addressed in the literature) stress that in order to tackle underachievement in comprehension, children must be explicitly taught the techniques required. (UKLA, 2010, P.13) This in turn will help increase children's metacognition which is essential part of reading because "it helps students learn to consciously think about and reflect on their strategy use." (Oczkus, 2010, p.33)



*Teacher: What prediction is all about?*

Child A: It makes you think about what is going to happen next.

*Teacher: What do we need to do to predict and when do we do it?*

Child B: To predict we need to read the title, blurb or look at the pictures.

Child C: We can predict at the start of the story or at the beginning of a chapter.

### Questioning

*Teacher: Who does the questioning?*

Child B: Everyone that is reading can do it.

*Teacher: What do questions do, why do we use them?*

Child D: They help you remember stuff.

Child E: They keep you interested.

*Teacher: When do we use them?*

Child B: Anytime in the book Figure 10

**Figure 9.**

As evident in figure 9 the children are beginning to gain confidence in using the strategies and are able to identify how the strategies help them. Moreover, in figure 10 it is clear that the children have a much clearer understanding of the strategies, as they are able to express what each strategy is and how and why it helps them. This increase in conscious reflection regarding strategy use will continue to assist them in “monitoring and assessing their ongoing performance in accomplishing a cognitive task” (Dole et al, 2009, p.349).

In turn, this increase in self-efficacy and development of metacognition had a profound impact on their reading comprehension scores (see figure 11) especially with regards participant two who shows a +8 increase. Moreover the significant increase in scores further supports the claims of the NICHD (2000) which regarded RR as “an effective practice that improves students reading comprehension” (as cited in Oczkus, 2010, p.2).

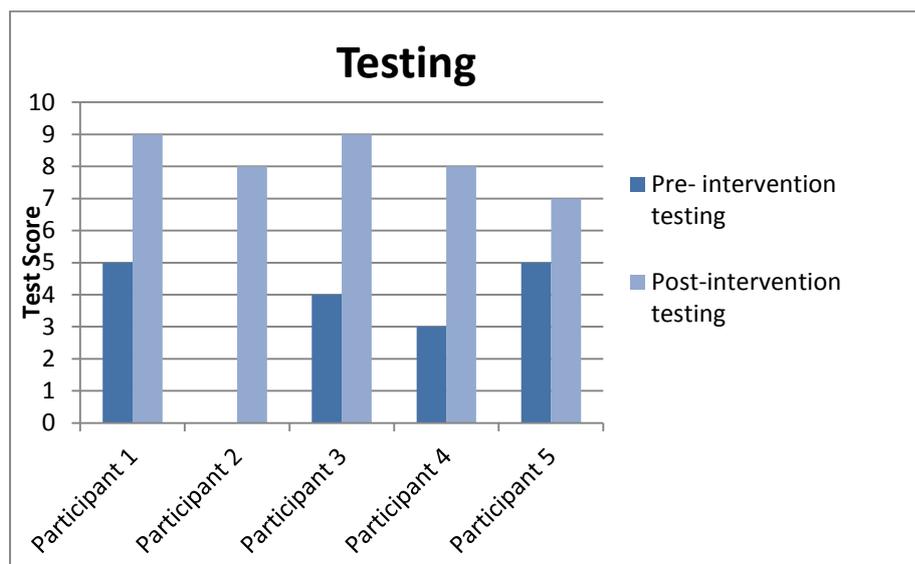


Figure 11.

### **Social Interaction**

As identified in the literature review, Vygotsky (1978) stresses that children learn best when interacting with one another. He concludes that teachers and pupils should work collaboratively to find meaning in a text and that no one should have all the answers.

### Observations

During this discussion one child had stated that the condition were uncomfortable, after I had recorded this, she highlighted that I had written comfortable instead of uncomfortable. While I was making the correction, another child said to her "you can't correct the teacher".

Figure 12

In light of figure 12, it is evident that during the early stages of the intervention programme the children regarded the teacher as the fount of knowledge as opposed to a partner and part of the working group. Therefore it was clear much work was required to promote cooperative learning between pupils and teachers. Based on the review of literature, the teacher decided to implement the use of discussion during reading time and effective feedback. Oczkus (2010) regards discussion as a key factor in promoting children's ability to work independently and motivation. Furthermore, the teacher ensured that the pupils received effective feedback during their discussions, Perry (2012) highlights the importance of this as a means to refocus learning goals; the goal which in this instance is the application the RR strategies.

Furthermore, it is evident from Figure 13 just how effective these strategies proved, as towards the end of the programme the children were able to provide each other with peer support in order to further enhance their understanding of a text with little/no teacher involvement.

At this point one child asked the group if the English soldiers would be bombing concentration camps, I encouraged him to ask the rest of the group, one stated that they were, whereas another stated that Hitler wasn't in the concentration camps, only Jewish people.

Figure 13

This increase in co-operative learning not only led to an increase in the children's individual accountability and positive interdependence but it also fuelled engagement in discussion regarding current conflict and crisis (See figure 14)

In relation to the bombing of the bank the children began to talk about the events that had occurred in Paris the previous weekend and concluded that those people must have felt the same as Sophie.

Figure 14

This further reinforces the importance of general knowledge and experience to both comprehend a text (Graesser, 2007) but also to understand/make sense of the world around us.

#### ***Teacher- pupil Interaction***

##### Questionnaire

As identified in the literature, the role of the teacher is essential in promoting a love of reading. Not only does this role involve teaching reading strategies but also providing the children with texts that interest them. It is clear from figure 15 that prior to beginning the RR programme, four out of five children preferred reading recreationally to academically. When further questioned about this, the children stated that it was mainly due to the lack of "good books" in school.

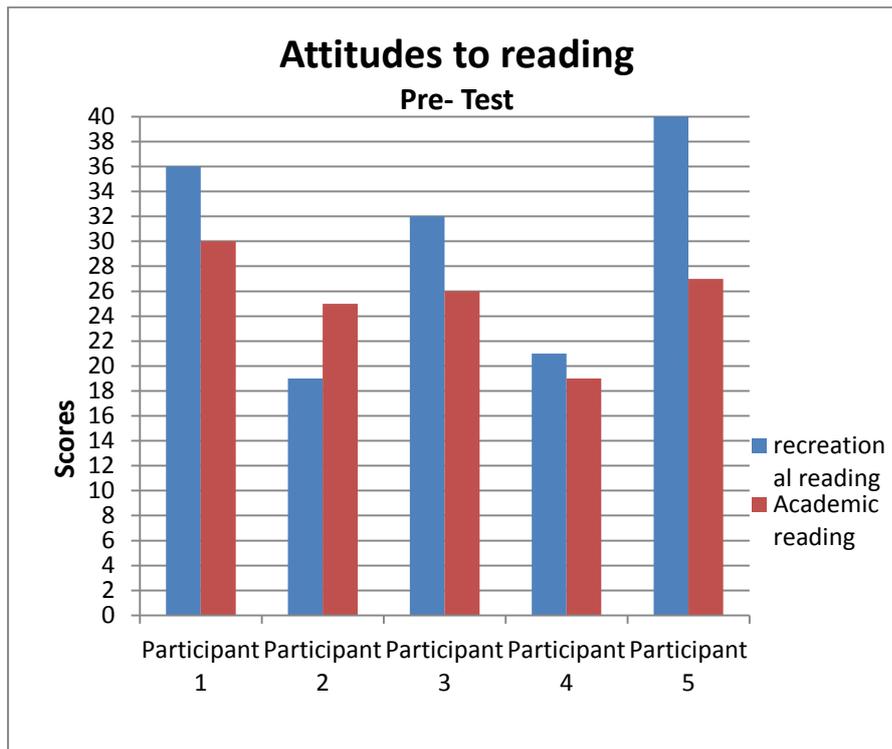
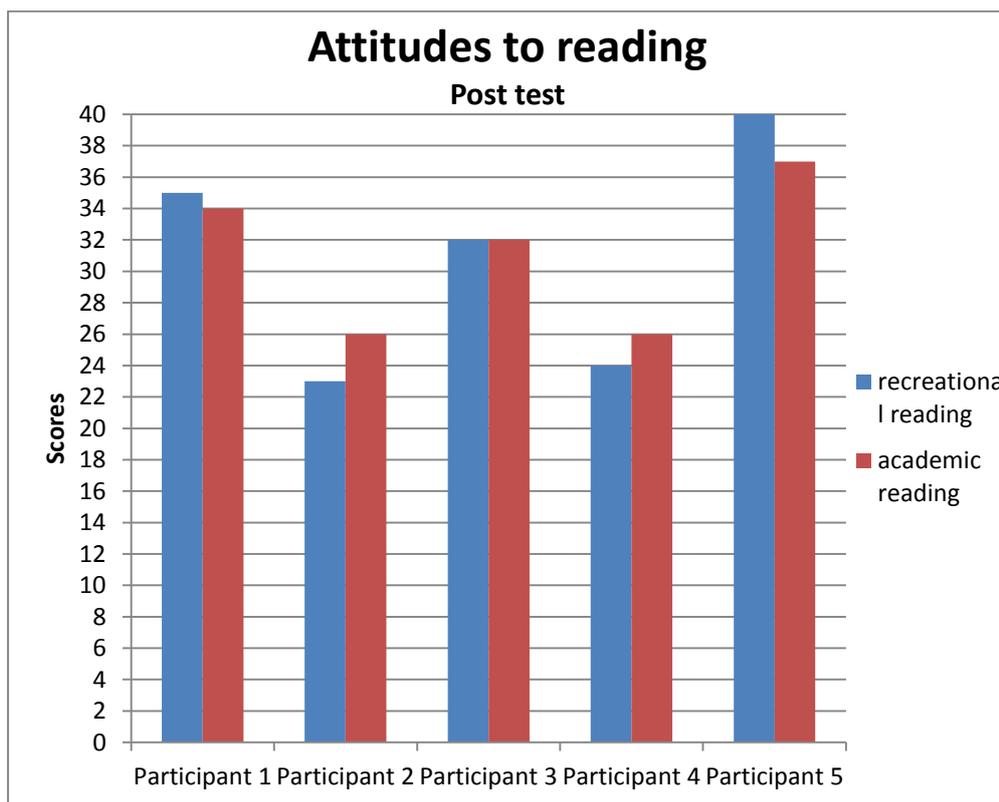


Figure 15.

As addressed in the review of literature, Cremin (2007) recognises that children have different reasons for reading and therefore need to encounter texts which are of a particular interest to them so as to inspire them to read. Therefore prior to beginning the programme I found out about the children's reading preferences and used this to create stimulating activities for them. It is evident from figure 16 just how effective this proved to be as each child's attitude to academic reading has improved.



**Figure 16.**

However, when comparing the two sets of data, I noticed that despite the increase in attitude, participant two and participant four's scores still remained the lowest. Interestingly, these two pupils were both boys, which poses a question regarding gender and whether it is perhaps another key factor in underachievement in reading?

#### Observations

Vygotsky (1978) outlined that children learn best with the assistance of expert practitioners. Throughout the RR programme, the role of teacher modelling was an effective scaffold, giving the children support and adapting it as their needs changed. Figure 17 highlights the modelling process at the beginning of the programme and figure 18 highlights the independent learning which occurred because of this.

I paused at the end of the first paragraph and took out a magnifying glass which was my prop for Clara the clarifier, I then stated that I needed the phrase "lumbering tanks" clarified. I looked it up in the dictionary and encouraged them to read the sentence to check if this definition made sense

Figure 17

During this section the clarifier used the dictionary to find the word scullery, prior to finding the definition he has suggested he thought it was a cupboard based on what the text had said about the door being opened. However, after checking the dictionary he read aloud that it was in fact a room.

Figure 18

Furthermore, it is evident from these observations just how important a sound knowledge of the strategies is, because (as supported by Miller, 2002, p.55) the way I say and do it became the way they say and do it.

Finally another important role of the teacher (as identified by Bandura, 1995) is providing positive feedback which encourages pupil confidence and motivation. Throughout the programme I praised the children for their achievements and efforts. It is clear from figure 19 and 20 that this had a profound impact on their attitude to reading.

At the point a child who had previously expressed his dislike for using a dictionary asked if he could look up the next word which needed clarified. I was very pleased to hear this and glad that this child's confidence is growing with regards using a dictionary.

Figure 19

"I would love to read the boy in striped pyjamas can we do an extra week with you"- Child A

Figure 20

To conclude, it is clear that RT proved to be an effective intervention strategy across all four areas as identified in the literature. (See figure 21)

	<b>Pre- intervention</b>	<b>Post intervention</b>
<b>Pupil Cognition</b>	Skills required becoming a good reader? Good word recognition. Able to decode words via sounding them out.	Skills required becoming a good reader? Application of background knowledge. Use of Inference. Good word recognition. Able to decode words via sounding them out. Knowledge of strategies.
<b>Metacognition and self-efficacy</b>	Didn't like reading out loud. Disliked comprehension work. Low confidence during independent test.	Requested to read aloud. Were able to use and reflect on the RR strategies in both independent and group work. Significant increase in comprehension test scores.
<b>Social Interaction</b>	Regarded the teacher as the fount of all knowledge.	Open to discussion in order to gain more understanding of a text. Able to make suggestions whether they were correct or not. Able to transfer their understanding of a text to modern events and vice versa. Use of peers as important learning support
<b>Teacher-pupil interaction</b>	Poor attitude to academic reading Dependent on teacher for instruction.	Significant increase in attitude to academic reading Able to work independently Increase in confidence. Effectiveness of small group intervention.

**Figure 21.**

## **Discussion and Conclusion**

### *Aim of the project*

The intention of this study was to explore the effectiveness of Reciprocal reading as an intervention for underachieving children. The children who participated in this study underwent a six week programme which consisted of 12 teaching sessions. During these sessions they were taught how to use the RT strategies: predicting, clarifying, questioning and summarising. These sessions involved the teacher explaining and modelling the strategies and then giving the children opportunities to practice them. The results obtained from the pre and post intervention reading comprehension test indicate that application of the RT strategies helped five out of five children to become better comprehenders. Therefore, this research suggests that the Reciprocal reading is an effective intervention for underachieving children.

### **Summary of research findings**

The research questions investigated in this project were:

1. What are the cognitive skills children need to be secure with, in order to understand text?
2. What impact does the teaching of RR strategies have on children's metacognition and self-efficacy?
3. What strategies/classroom approaches are effective in ensuring that RR has a positive impact on pupil's engagement with and understanding of text?

4. How effective is RR as an intervention to impact on underachieving pupils?
5. What are the cognitive skills children need to be secure with, in order to understand text?

The Rose Report (2006) viewed decoding as a key cognitive skill in reading hence the recommendation that children be explicitly taught phonics daily to avoid decoding bottleneck (Tennant, 2015). Prior to beginning the programme, the children adopted a similar attitude as this, however, it would appear from the findings that post intervention, they now recognise that reading is much more complex, hence the exploration of a range of process including use of background knowledge and inference. A key factor in enabling this was the modelling work demonstrated by the teacher which gave the children an insight into what cognitive skills assist us when reading and how they are effective.

*What impact does the teaching of RR strategies have on children's metacognition and self-efficacy?* Henk and Melnick (1995) believe that the way individuals feel about themselves as readers is a key factor in determining underachievement. Prior to beginning the Reciprocal Reading programme, the children had low self-esteem regarding comprehension as evident in their test scores. However due to the teaching of the RT strategies as well as an understanding of how to apply them, the children showed a significant increase self-efficacy which had a knock on effect on their test scores. The role of social interaction also had an important role in building the children's confidence and willingness to participate.

*What strategies/classroom approaches are effective in ensuring that RR has a positive impact on pupil's engagement with and understanding of text?*

Throughout this study it became clear the fundamental role social interaction has on children's reading comprehension and their enjoyment of the reading process. The children who participated in this research study worked closely with the teacher who modelled the strategies in the beginning sessions before encouraging the children to think out loud and discuss their thoughts in order to gain more understanding of a text. This in turn promoted greater independence and confidence in making suggestions whether they were right or not. Furthermore, modelling the RT strategies proved an effective scaffold which gave the children the chance to practice and refine the strategies before bridging what Vygotsky (1978) labelled the 'zone of proximal development'.

Vygotsky (1978) outlined that children learn best with the assistance of expert practitioners. Throughout this study it became clear that teachers must be knowledgeable about RR strategies and aware of how best to implement them during reading lessons. As with all aspects of learning there is no "one size fits all" and therefore teachers must be flexible and responsive to the needs of the children they teach.

Within this particular study, a key finding was the importance of teacher/pupil interaction and the impact this has on pupil's attitudes to reading. A key factor which contributed to this was the rapport which the teacher built with the pupils which ensured the pupils felt that all their contributions were valued. This was particularly important when selecting texts, therefore the teacher ensured that those chosen reflected the interests of the children namely the area of WWII. She also ensured the selected texts provided an adequate level of challenge without being too difficult, furthermore the teacher ensured she was well acquainted with the texts so as to facilitate and maximise teaching and learning opportunities.

### **Areas of Further Study**

While comparing my quantitative data, I noticed that the two lowest scores both pre and post intervention were both boys. This poses a huge area for further study with regards gender and whether it is a contributing factor in the area of underachievement. Furthermore, having addressed

the effectiveness of Reciprocal Reading as an intervention within a focus group, I feel another potential area to study would be its impact at whole class level and whether it is as effective in a larger scale as it is as a small group intervention.

To conclude then, it is evident that Reciprocal Reading is an effective intervention strategy which has had a profound impact on the children's reading comprehension but also to their literacy skills overall. With regards to cost effectiveness (NIAO, 2013), it is clear that RR is low cost as it requires only the teacher, text and open discussion among the pupils.

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