

## Using testing to improve the quality of learning in reading

### Ocker Hill Academy

#### **Problem: What challenges do your school(s) have that need to be addressed?**

Testing pupils at regular times to inform areas of weaknesses in pupils' understanding are inconsistent across the school. This summative testing is often done in a way that is ineffective in the way that it can be used to impact on learning in the classroom. Normally, it is carried out, results collated, and then no longer referred to.

There is good practice in Year 6 where answers are marked by teachers alongside pupils. This is then used during a specific lesson to model answers to improve the pupils' understanding of what certain questions are asking for. This is clearly developing the skill of reasoning in its widest sense, as a transferable skill which can be used across the curriculum.

The following data for reading 2016–2017 confirms this:

#### **Attainment**

Year 3 (18 ARE) – 15.95

Year 4 (21 ARE) – 20.71

Year 5 (24 ARE) – 22.57

Year 6 (27 ARE) – 27.78

ARE – Age related expectations

#### **Progress**

Three being expected progress

Year 3 – 1.62

Year 4 – 3.05

Year 5 – 3.28

Year 6 – 4.47

Even though progress is not as good in the other year groups, the innovation will be put in place in Year 5. This is because:

- There is an NQT and an experienced teacher who leaves the school in December 2017 in

Year 3.

- There is a new teacher to the school as well as a job share in Year 4.

Due to these reasons, the only option is in Year 5 where there is, currently, the most experience apart from Year 6.

### **Innovation: How will the innovation help improve the problem you have identified and benefit teachers and learners?**

The innovation will be use of hypercorrection of reading tests. The approach will involve Year 6 teacher training Year 5 teacher in the techniques used during the reviewing of tests after the pupils have taken them.

These techniques will include:

- All tests teacher marked prior to go through session.
- Children use green pens to make changes/corrections.
- Children have testing notebooks in which they make notes about their own personal targets/ downfalls/ mistakes/key points to learn.
- Each question is looked at in turn considering the skills necessary. Although on many occasions, some questions will be missed out. Those that all children are successful need not to be covered. Time is better spent on areas of need.
- Longer (three-mark) questions are modelled with teacher thought processes shared with the children. Answers are demonstrated in blank test papers on the visualiser.
- Specific skills such as skimming, scanning, retrieval, inference, language, authorial intent and structure are taught. The children are taught to recognise what the question requires and methods such as bullet pointing, underlining key words and phrases in both the text and the question to answer effectively.
- Children's incorrect answers shared with the whole class regularly on the visualiser to unpick misconceptions and model answers.
- The children are encouraged to identify the purpose and audience of each text during the reading stage which helps them independently pick out the key bits of information needed to answer questions.
- Peer discussion is used to support learning and comparison of answers highlights where children have missed opportunities.

## **Existing evidence: What evidence is there that this innovation will improve outcomes?**

Regular testing, no matter how 'painful' it might be in the current climate of seemingly perpetual tests, is actually beneficial to learning.

There are benefits to regular testing. One is retrieval practice and the other is the hypercorrection effect or the effect on an individual when they find out that they've got something incorrect that they previously thought was correct.

According to Bjork (1975), 'Taking a test often does more than assess knowledge; tests can also provide opportunities for learning. When information is successfully retrieved from memory, its representation in memory is changed such that it becomes more recallable in the future.' Testing is more than assessment. Bjork (2011) sees testing as a 'learning event'.

Dylan Wiliam continues this idea (quoted in Hendrick and Macpherson, 2017), 'The more confident you are that you think an answer is correct but is actually incorrect, the bigger the improvement in the change to your thinking'. In discussion with fellow colleagues in the school, the main problem with the idea of further testing, as already articulated, is that everyone thinks that pupils are tested enough. The difference thought between the type of testing that people are concerned about – that of a test which serves no purpose but a score in a mark book – and hypercorrection is that the pupils are involved in the process. As Dylan Wiliam (2017) said 'The best person to mark a test is the person who just took it' (Hendrick and Macpherson, 2017). This is further reinforced by Black and Wiliam (2014) saying that, 'formative and summative functions intertwine...However, it should be interrelated with, consistent with and supportive of the pedagogic process as a whole'

Finally, from the research, the best way to reconcile the difficulties a teacher faces in balancing formative and summative assessment is by trying to have a consistent pedagogic approach. This is the purpose of developing hypercorrection in a classroom environment.

## **Research question or hypothesis: What effect will the intervention, implemented for how long, with which pupils, have on what outcomes?**

What impact does hypercorrection in three reading tests delivered every half term for five months have on the reading comprehension ability of Year 5 pupils?

What impact does hypercorrection in three reading tests delivered every half term for five months

have on the reading comprehension ability of high prior attaining Year 5 pupils?

What impact does hypercorrection in three reading tests delivered every half term for five months have on the reading comprehension ability of low prior attaining Year 5 pupils?

What impact does hypercorrection in three reading tests delivered every half term for five months have on the reading comprehension ability of free school meals Year 5 pupils?

**Method: Include sample, design, measures, intervention, process evaluation, and analysis**

Sample/ participants

Sixty-four Year 5 pupils from two classes at Ocker Hill Academy will participate, with 32 pupils in the intervention group and 32 pupils in the control group.

There will be a sub analysis of high attaining (HA), low attaining (LA) and free school meals (FSM) pupils in both classes. This sub analysis of the groups will be defined through standardised score at the pre-test (115 or more – HA; 85 or lower – LA) but also take into account other summative and formative data for example formalised teacher assessment, to alleviate any regression towards the mean. All Year 5 pupils' parents/carers will receive an opt out letter informing them that the anonymised data from their child will be used to help evaluate this innovation.

Ocker Hill Academy is a mixed Junior school in Tipton, Sandwell in the West Midlands conurbation. Its context is:

- IDACI - 9199
- FSM (including Ever6) - 34% which is slightly above the national average
- School deprivation indicator - 0.31 which is above the national average
- SEN Support - 9.2% (Nat 12%)
- EHC/Statement - 2.8% (Nat 1.3%)
- EAL - 7.2% Well below the national average
- Ethnicity (Whole Academy) - 77.2% White British and 22.8% Ethnic minority groups
- Gender (whole academy) - Girls 52.4% Boys 47.6%

One Year 5 teacher has 10 years' teaching experience, mainly in Year 5 but has two years in Year 4. They have a TLR2, middle leadership role for mathematics and science. The other Year 5 teacher has three years' teaching experience in Year 5 and 6, two years of which were in another school.

### Design and assignment to condition

Through planned training development, one of the Year 5 teachers will be trained in hypercorrection techniques by a member of the Year 6 staff and member of the senior leadership team (SLT) of the school.

The parallel Year 5 teacher will take the tests as normal and carry out any review of the tests as they would do normally. This will be the control group.

The teacher who was chosen to be part of the intervention was the teacher with the least experience. It was felt that they would be more of a 'blank canvas' on which the relationship between the Year 6 member of staff and themselves could develop in a coaching role.

### Measures

An outcome measure of a test in reading will be taken at the start of the innovation – a pre-test.

The training of the one member of the Year 5 team will then take place and the intervention will then take place over the year finally ending with an end of year test – post-test – to establish how much progress pupils in the intervention and control groups have made.

The pre- and post-tests will be comparable using a standardised measure and will be administered by the class teacher. The tests will be equivalent versions of NFER tests Suite 2. This test will focus on reading comprehension – the content of which will be mapped to the content domain of the Key Stage 2: English reading test framework published by the DfE 2015.

### **Administration and marking**

The administration of the tests will be overseen by a member of the SLT and will also be marked by a member of the SLT. To reduce bias in marking, tests from the whole year group will be mixed so they are not marked in classes, the names will be covered and the member of the SLT marking them will be someone who does not know Year 5 pupils well enough to recognise any aspects of their writing, such as handwriting.

### Intervention

After the training in the above techniques has taken place, the Year 5 teacher will plan for reading tests from January. There will be three tests every half term. After each test, there will be a hypercorrection session. A member of the SLT or the Year 6 teacher who delivered the training, will observe the lesson.

The parallel Year 5 class will act as a control group. They will also take three reading tests every half term but will not carry out the techniques in hypercorrection session.

### Process evaluation

All hypercorrection sessions will be observed, as previously discussed, by a member of the SLT or the Year 6 teacher who delivered the training. They will observe the hypercorrection sessions to check that it is in line with the training that was delivered but also as a way of discussing issues arising from the implementation of the innovation by the class teacher. An observation checklist has been devised to ensure this is carried out consistently.

Interviews will take place with both teaching participants regarding their views of the innovation of hypercorrection as part of the evaluation process. This will be done by a member of the SLT. A selection of pupils from the designated groups (see Method – sample a) that the innovation will be analysing, will also be interviewed.

The questions that will be asked of the teachers involved will be focusing on what they feel the impact of hypercorrection is, with particular reference on any changes to pedagogy.

The questions that will be asked of the pupils involved will be focusing on if they feel the approach of hypercorrection is helpful in their ability to be able to address misconceptions effectively and also if they feel that it has provided skills that can be used across the curriculum.

### Data analysis

The analysis of any quantitative outcome data provided from the testing will be reported as the mean scores of the control and innovation groups at pre- and post-tests. From which, the effect sizes will be calculated to give a standard deviation of the whole sample.

Data from the NFER pre and post tests will map the progress for the following groups of pupils – HA, LA & FSM. These groups have been chosen as they represent the focus of the school: there is a high correlation between low prior attainment and pupils being in receipt of free school meals, particularly in reading comprehension, and there are significant issues regarding facilitating access to the higher order reading skills for high prior attaining pupils.

**Conclusion: What will happen if your innovation improves outcomes, or not?  
What are the limitations of your evaluation?**

If the innovation is effective in improving outcomes the training and process of hypercorrection will be developed across the whole school. As well as this, it will be shared with local schools in Tipton, our learning community area.

If it is not effective, the evaluation will look at if the delivery of the innovation was as developed through the training. This would also include how observations were carried out, and by who, to

see if they were effective in their role for ensuring the innovation didn't deviate from the original version. Finally, rigorously review the data, how it was collected and collated and if the groups were well matched on characteristics across the Year 5 classes.

### **Limitations**

A potential limitation the teachers and SLT involved need to be aware of is diffusion of treatment (when control group pupils experience elements of the intervention). There has been a focus through staff meetings about using testing feedback more effectively across the school, but this has not been to the same focus as already discussed in the description of the innovation where there is a defined set of techniques.

## References

Bjork, R. Applying Cognitive Psychology to Enhance Educational Practice. Retrieved 26<sup>th</sup> March 2018 from <https://bjorklab.psych.ucla.edu/research/>

Hendrick, C. and Macpherson, R. (2017) *What Does This Look Like in the Classroom: Bridging the Gap Between Research and Practice*. Woodbridge: John Catt Education Ltd.

Black, P. and Wiliam, D. (2014) Assessment and the Design of Educational Materials. *Educational Designer*, 2(7).

