

Traditional Questioning vs Interactive Questioning; which is best for Raising Attainment

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1. Identifying, analysing and scoping the perceived learning problem or opportunity

Using written questions and answers has been a method of teaching for centuries, however, in the modern world there is a whole range of other interactive questioning methods such as Blooket and Kahoot. Raising Attainment is a responsibility for all, and with the effects of COVID-19 still present in students raising attainment is harder than ever. Can using interactive questioning improve attainment or do the traditional methods still work best.

2. Research /Reading

Existing practice and relevant theory, for insight that could inform the development of a change strategy.

Barbera Pavey, Margaret Meehan and Sarah Davis 'The Dyslexia-Friendly Teachers Toolkit' Chapter 5- Dyslexia and Science [2013]

Louis Cohen, Lawrence Manion and Keith Morris 'A guide to Teaching Practice' Questioning and Recall pg 229-239 [1996]

Tom Sherrington 'Rosenshines Principals in Action' Strand 2- Questioning. Pg 27-34 [2019]

Tom Sherrington and Oliver Caviglioli 'Teaching Walkthrus' Questioning and Understanding- Check for Understanding and Feedback that Moves Forward, pg96-97, 104-105 [2020]

3. Data Collection – Baseline/Bias/Data corruption.

In class I realised I used Blooket/Kahoot as an end of lesson revision game and used written questions as a learning task.

I realised engagement levels with written questions had dropped and whilst checking jotters I noticed the lack of basic literacy skills. Using iPads could be a solution to this problem and online questioning platforms could be used as a learning tool as well as a revision tool.

There is an increase in the number of Dyslexic pupils which is a barrier to learning as most often they have a sound understanding of tasks and questions but struggle to portray answers on paper.

4. Creation of planned intervention.

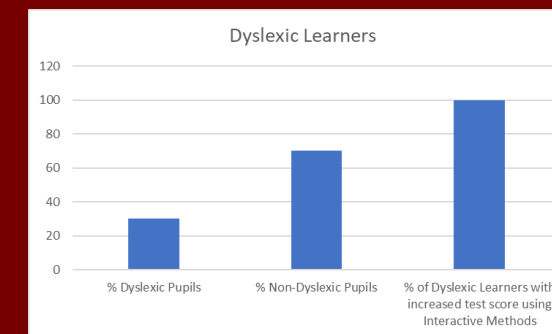
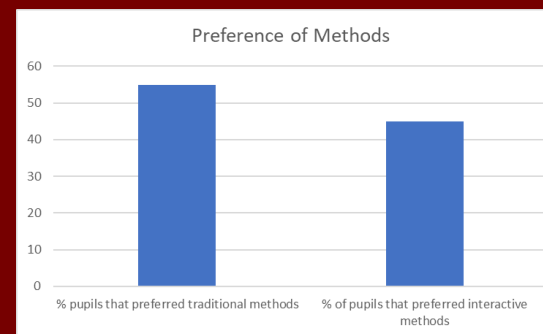
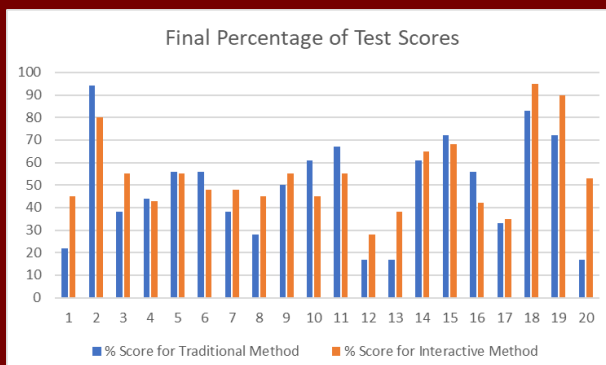
Over the space of two topics in Science I used traditional written questions only for one topic and interactive questions only for the other topic. There was 20 S1 pupils in the class (11 females and 9 males). I then assessed the units with an end of topic test and gave the pupils a Microsoft forms questionnaire asking for feedback on their preferred method of questioning

5. Intended Outcomes

1. I would like to see what method raises attainment.
2. I would like to see which method the pupils preferred in terms of engagement.
3. I would like to see if interactive methods have a larger effect on dyslexic pupils.
4. I would like to see how big the attainment gap is between the two methods.

Results

Below are three pie charts graphing the results found in appendix 1



6. Reflections /Critique of planned intervention including Limitations & Strengths

Results can be found on Appendix 1.

Using traditional methods of questioning has positives, there is no need to rely on a device and the physical process of writing can help understanding. Using technology also has positives, questioning can be more exciting and fun in a classroom environment. The study was carried out on two separate units of the course-ideally two similar classes would have completed the same unit, one using interactive methods and one using traditional methods. Some pupils do not bring their iPad or it is not charged so planning a full lesson using the iPad can be challenging.

Strengths

Pupils engage with the iPad when the questions are given to them in a game format. Some pupils prefer writing as they need to process the information by writing information down and struggle to retain information by just clicking answers. The study shows that iPads have been a positive introduction to help raise attainment and a potential solution to a barrier that has been present for years for dyslexic pupils.

7. Recommendations for application in class Sharing with colleagues/pupils/stakeholders

Recommendations should be on an individual basis with a variety of traditional and interactive questioning methods in all lessons. Dyslexic users should be prepared to explore use their iPads in every lesson.

I plan to explore these theories in more detail with more than one class and one level.

Appendix 1- Results

Table 1. The number of pupils that increased their scores using traditional methods and interactive methods

Number of pupils that had better results using traditional methods	Number of pupils that had better results using interactive methods
7	13

Table 2. Number of pupils that believe interactive methods help them retain more knowledge

Number of pupils that believe traditional methods help them more	Number of pupils that believe that interactive methods help them more
11	9

Table 3. Number of pupils that are dyslexic

Number of dyslexic pupils	Number of non-dyslexic pupils	% of Dyslexic Learners with improved test scores using interactive methods
6	14	100

Appendix 1 - Whole Class Results

Pupil	% score in test using traditional methods	% score in test using interactive methods
1	22	45
2	94	80
3	38	55
4	44	43
5	56	55
6	56	48
7	38	48
8	28	45
9	50	55
10	61	45
11	67	55
12	17	28
13	17	38
14	61	65
15	72	68
16	56	42
17	33	35
18	83	95
19	72	90
20	17	53