The use of traffic lighting to evaluate pupil learning.

Rationale

Assessment of children’s progress is one of the drivers of improvement within the National Improvement Framework and so it is essential that we strive to improve our assessment techniques in the classroom in order to raise attainment and achievement (Scottish Government, 2019.) Assessment is a key focus in many School Improvement Plans, this led to assessment being the focus of this enquiry with a specific focus on formative assessment, which allows for two-way communication in the classroom and helps to drive learning forward (William, 2011; Priestley and Sime, 2005). It was decided to investigate the impact of using traffic lights in the classroom to help teachers evaluate pupils’ learning. Traffic lights were used as a formative assessment tool and teachers used this information to plan the child’s next steps. John Hattie (2012) states that when pupils’ learning is visible for teachers then the pupils’ achievements increases as it makes it easier for teachers to identify when learning is taking place and they can plan next steps. Traffic lights were chosen as they were easily implemented into the classroom and were easy to use across all levels of the curriculum.

Aim

To introduce traffic lights as a self-assessment method into the classroom.
To use the self-assessment method to evaluate pupils’ learning.
To use the self-assessment method to inform next steps for pupils and teachers planning.

Methodology

Method 1: Traffic light cards on desks as a visual display for the teacher.
Method 2: Traffic lights in jotters at the end of a written task.
Method 3: Teacher observation of pupils in the lesson.
Method 4: Class discussion about the effect of using traffic lights.

This enquiry was conducted using a P7/6 class of 24 children, over a period of four weeks during Maths lessons. The self-assessment strategy used was traffic light colouring dots in the jotter at the end of a task. (Appendix 1.) The self-marking system that was in place was the use of traffic light cards, and pupils would display a green, amber or red on their desks depending on how they did after marking the first 5 answers of their task (Appendix 2.) The green card would be displayed if they answered all 5 questions correctly. The amber card would be displayed if they got 1-3 questions incorrect. The red card would be displayed if they got 4 or all questions incorrect. The teacher also observed the use of the traffic light cards in the lesson to gauge pupils’ initial understanding of concepts. The teacher initiated a class discussion where pupils were given the chance to discuss and feedback the impact that using traffic lights was having on their learning.
Findings

Once the traffic light cards were introduced into the class, it took time for pupils to become independent at using this system. Once they were independently using the system, the teacher was able to visually gauge how well pupils were understanding the learning and the task as they would see either a green, amber or red card displayed on their desk after the pupil had marked the first 5 questions on their task. The teacher was able to work with those pupils who were on red or amber first and was able to stop the lesson if a whole group were not understanding the concept or task. Some pupils initially felt embarrassed to display an amber or red card in front of their friends; time was then spent discussing the importance of being honest and supporting our peers in the class who find concepts/tasks challenging. As time progressed, the class ethos changed and some pupils were helping their peers who were on red and amber.

Pupils were also asked to put a traffic light dot in their jotter at the end of a block of learning as a self-assessment method. Pupils were reminded that they should be assessing themselves against the success criteria; however, it was often found that pupils who were able and getting all their work right were still marking themselves as an amber or red. It was found that pupils would often traffic light against their confidence or enjoyment of a task and not their learning. The teacher also found that using this method was not timely as they were seeing how pupils self-assessed after the learning was completed and not during – where they could provide support and intervene if needed.

Pupil self-assessed with an amber although they got all questions correct.

Throughout the enquiry, the teacher observed how pupils were using the traffic light systems and found that those pupils who regularly displaying green cards then began to fall away from using the card system that was on the table. As the topic changed in Maths, those pupils who were displaying green cards for the previous topic then found the following topic more challenging and found it harder to get back into the habit of using the card system to self-assess their learning. The teacher had to remind pupils to mark their work and self-assess using the coloured cards on their desk.

Finally, the teacher initiated a class discussion where pupils were able to share their thoughts on the use of traffic lights in the classroom. Pupils liked the idea of using traffic lights in their jotter but expressed that it did not impact their learning following the self-assessment, “I like
doing it in my jotter because then people can’t see when I’m on amber or red but I don’t see the point of it.” Pupils were keen to keep the use of the card system in the class and suggested that it prompted them to check over their work independently to see where they went wrong, “it’s good to get help if you’re on red” and “sometimes if I get an amber I can find the mistake without asking the teacher.” Even those pupils who were displaying green cards for a block of learning found the card system beneficial, “I like seeing that I got all the questions correct. It helps my confidence.”

Conclusion

Despite the short period of time in which this enquiry was implemented, the results show that using traffic lights within the classroom is beneficial for teachers to evaluate the learning achieved by pupils. The enquiry suggests that using traffic light cards as a visual assessment gives the teacher the opportunity to evaluate the learning during the lesson and reflect, then adapt the lesson to meet the learners’ needs promptly. Using the traffic light cards also meant that teachers were using their time more effectively in class. However, it is important for the teacher to make sure that the use of the cards is consistent as people’s abilities can change depending on the concept/topic within Maths. The enquiry found that simply using traffic light dots in the jotter, although it had some positive effect, was less effective as it often was assessing a pupils’ enjoyment of the task or their confidence in completing the task and not their understanding of the learning. Using traffic light dots in the jotter also meant that teachers were not able to respond as quickly to those on amber or red, as this was not done until the end of the lesson.

Implications for Further Practice

The result from this enquiry has led to the conclusion that using the traffic light dots in jotters was not beneficial for teachers to evaluate pupils’ understanding of the learning. Although there were some positives, it would not be valuable to continue using them, in the same way, in the classroom as it did not give a true reflection of how well a pupil understood the learning. Instead, it would be worthwhile investigating if using the traffic light dots in jotters against each success criteria had a more accurate reflection of the pupils learning. Due to the success of this enquiry, I will continue to implement the traffic light cards technique in order to improve teacher’s evaluation and, in turn, pupils’ learning. This enquiry was only conducted during Maths lessons and it would be beneficial to conduct an enquiry into the impact the traffic light card system would have in other curricular areas. There should also be consideration of the ethos within the classroom, where teachers should ensure that there is a supportive and positive classroom ethos. This will allow pupils to feel comfortable and confident at displaying a traffic light card on their desk, where other pupils can see it. The traffic light cards allow the teacher to reflect on their practice and make any adjustments in order to increase success for each pupil.
Bibliography


Appendices

Appendix 1: pupil uses traffic lights in jotter to self-assess against lesson’s success criteria.

Appendix 2: pupil uses traffic light cards to visually display their progress for the class teacher.