

The use of Traffic Lights in the classroom.

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Practitioner Enquiry

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Contents

List of Acronyms		page
1	Rationale	3
2	Aims	3
3	Methodology	3
4	Findings and Discussion	5
5	Conclusion	9
6	Implications for Future Practice	10
7	Bibliography	11

Rationale

'Traffic Light Assessments' are a form of 'Formative Assessment.' Moss & Brookhart, (2009) explains, "Formative assessment is an active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement." The aim of traffic lights in the classroom is to provide teacher, peer and self-assessment of pupils' work in order to 'help students identify their strengths and weaknesses and target areas that require improvement.' University, C. (2020). By incorporating Formative Assessment in the form of 'Assessment is for Learning' (Aifl) strategies, teachers are able to 'recognise where pupils are struggling and address problems immediately' by giving formative teacher feedback. University, C. (2020).

Aims

This enquiry aims to explore the use of Traffic Lights in the music classroom through self-assessment. Andrade, H. & Valtcheva, A. (2009) states, "Self-assessment is a key element in formative assessment because it involves students in thinking about the quality of their own work, rather than relying on their teacher as the sole source of evaluative judgments." By exploring formative teacher feedback as well as pupil self-assessment in the classroom, I aim to find out if 'Traffic Light Assessments' impact the pupils' understanding towards their own progress and planning of their next steps. After obtaining reliable results and engaging in previous literature, I will investigate if there are any benefits or disadvantages of traffic lights, and see how this will impact the pupils' metacognition in the classroom. I believe it is important for pupils to understand what stage of the learning process they are at in order to proceed and succeed. Hopefully, there will be a visible increase in pupil awareness of their next steps in their learning.

Methodology

My enquiry participants were one class of 20 first year pupils aged between (12-14). This year group was chosen so that tasks could be carried out within lessons that would not affect the pupils' learning of the course. This was a wise choice as the first year pupils had no final exams to complete at this time.

This enquiry was carried out every Friday for 4 weeks during a performing music lesson where they learned 'Dance Monkey' on their chosen instrument. The focus for pupils was to use target sheets to set an achievable target for the lesson, self assess by Traffic Lighting their progress and then compose a reflective comment. This would provide them with information to then base their next target on the following lesson. They wrote their targets at the beginning of the lesson. At the end of the lesson, they circled whether they were red, amber or green in correspondence with their personal target and then composed a reflective comment on why they thought they were that colour. I was able to provide the pupils with verbal feedback on their musical performances in order to assist them with their decision and write down a realistic answer. As the pupils were in first year, instead of using smiley faces and coloured cards, I incorporated Traffic Lights into a table format, using the words of the colours and highlighting them Red, Amber and Green. Green was circled if the target was achieved, Amber was circled if they achieved half of the target, for example if they played all

the correct notes on the keyboard but struggled with the rhythm and Red was circled if they could not achieve their target at all.

Day one, I chose 6 pupils of mixed ability to take part in a focus group for the enquiry. During this time, the group engaged in discussion with myself about their experience of traffic lights in a classroom. I took notes on what the pupils said to provide qualitative data for the enquiry. I informed the focus group of a second meeting that would take place at the end of the project. At the second meeting, I asked the same questions that I asked 5 weeks before and recorded notes from their answers. I was able to compare the answers from both focus group meetings in the hope of finding different answers about their experiences and understanding involving Traffic Light use in the classroom. I kept a reflective journal throughout the enquiry, taking notes on the pupils' progress and experiences of using traffic lights. Numerical data (quantitative) was collected from this journal and supported the findings for this project.

Bar graphs and pie charts were constructed to clearly show the pupils' response using the results from the focus groups and reflective journal. Quotations from students' reflective target sheet comments and the focus groups provided more in depths information to support my findings.

Findings and Discussion

1. Focus Group

The same 6 pupils in the focus group were asked a series of 4 questions at the beginning and end of the enquiry. The first question was;

“What are Traffic Lights in the classroom?”

Focus Group at the Beginning:

The pupils thought traffic lights were a ‘voting system.’ They mentioned that they were, “Colours to see what stage you’re at.” They also provided examples such as; ‘teacher stamps’ and ‘circles’ to colour in.

Focus Group at the End:

After experiencing traffic lights in Secondary school, pupil’s then said that traffic lights were a, “Visual grading system that helps us understand what we need to do next time.”

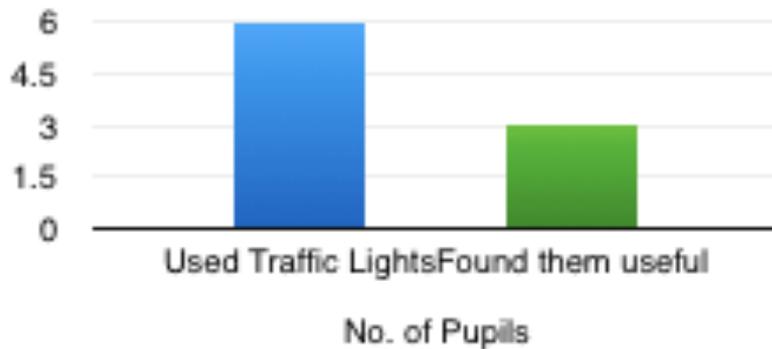
From this outcome, pupils' thoughts on what traffic lights are, were based on their primary school experiences. Pupils may not have known the purpose of self-assessment when in primary school, but after utilising traffic lights in a different form, it helped them become aware of why they were colour coding their work. The second question was;

“Have you used them and found them useful?”

Focus Group at the Beginning:

Out of the pupils that had used traffic lights in the classroom, only 50% of them said they found them useful. (fig.1.1)

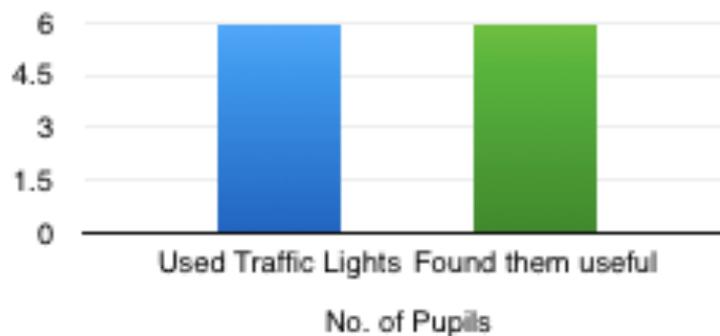
Pupils that found traffic lights useful (at the beginning of project) (figure 1.1)



FocusGroup at the End:

All the pupils had experience of using traffic lights and all the students said they found them useful. (fig 1.2)

Pupils that found traffic lights useful (at the end of project.) (figure 1.2)



There was an increase of 50% in pupils that found traffic lights to be useful for their learning. The third question was;

“What do you think about traffic lights?”

Focus Group at the Beginning:

Through discussion, the pupils thought traffic lights were, “Quite good to reflect on classwork.” Other pupils contradicted that statement by saying they were, “Not bad” and “Not beneficial in the past.”

Focus Group at the End:

At the end of the enquiry, the focus group said, “I now think they are useful to assess my work appropriately.” Others mentioned, “It is better to know my level of work is Green, meaning I need to try my best for it to remain Green, so that I am always producing my best work.”

To conclude question three, pupils are more aware about what traffic lights are and they have a better understanding of the coding system. The Fourth question was:

“Do you think they will impact your learning or not?”

Focus Group at the Beginning:

They were seen as being ‘babyish’ and only going to be of use in certain subjects. Some pupils also said they would be aware of what they need to work on already before introducing traffic lights but they were willing to participate in the enquiry to see if it changed their minds.

Focus Group at the End:

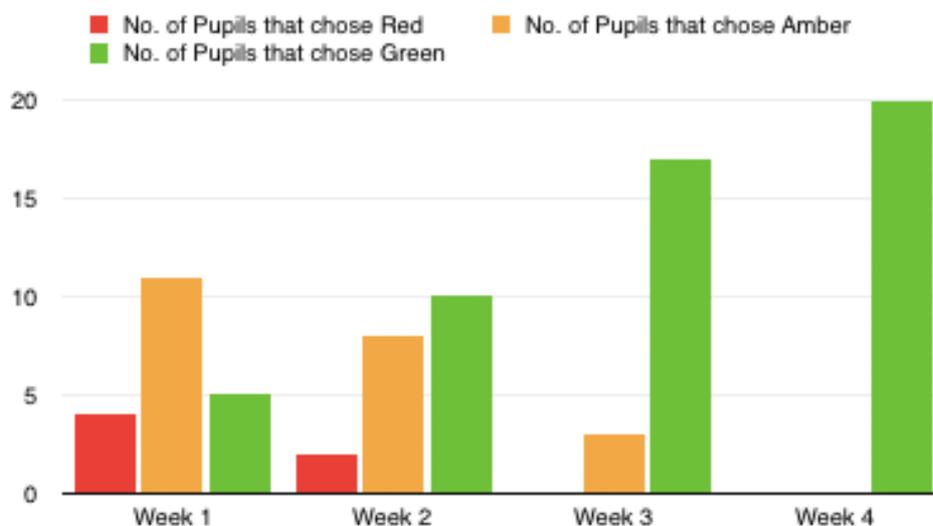
The pupils discussed that the target sheets containing the self-assessment were not babyish and were completely different to the ones they used in primary school. The pupils also mentioned that they still believed they could only be beneficial in some specific subjects.

The findings from above charts and statements show that the pupil’s recent experiences of traffic lights as self-assessment activities for understanding their next steps were beneficial for them and made them feel they need to constantly be striving for a Green on their work.

2. Target Profile Sheets

The pupil target profile sheets were combined with a more mature form of Traffic Light assessment through the use of words and not ‘stamps or dots.’ When comparing individual traffic light grades, it was noted that the pupils either remained the same (when they achieved green in the first lesson) or they moved up a colour from red to amber or amber to green.

No. of pupils that chose Red, Amber or Green over a 4 week period. (figure 1.3)



The above graph shows a clear decrease in the red and amber traffic lights and a significant increase in green. This shows that everyone in the class, except one pupil who was amber until week three, either stayed at the same traffic light for a minimum of one week or they moved up a colour each week (or stayed at green). This did not mean everyone could play the full song of 'Dance Monkey' on their instrument but, they all achieved their personal targets whether that be to play just the chorus, learn the piece one handed or complete the full song using both hands.

As each pupil remained the same or increased (bar one pupil), this made it clear to me that the pupils were able to set themselves achievable targets for their next steps based on their previous colour and comment.

Example 1

Pupil Target Profile Sheets.		Miss McHugh.		
Name: [Redacted]				
Instrument and piece	Date	Target	Traffic Lights	Reflective Comments.
Drums Dance Monkey	17/10/20	hear notes and some part rhythms	RED AMBER GREEN	need more help from teacher because I didn't get it
Drums Dance Monkey	25/10/20	same target get help from teacher	RED AMBER GREEN	I can play the next part but need to practice the rhythm more
Drums Dance Monkey	31/10/20	practice 5 min drum rhythm	RED AMBER GREEN	I can play the rhythm
Drums Dance Monkey	01/11/20	play drum along with backing track	RED AMBER GREEN	I can drum in time with the song
			RED AMBER GREEN	

Example 2

Pupil Target Profile Sheets.		Miss McHugh.		
Name: Lily [Redacted]				
Instrument and piece	Date	Target	Traffic Lights	Reflective Comments.
Keyboard Dance Monkey	17/10/20	learn and practice the chords and play in time with the drum	RED AMBER GREEN	I was able to fully learn the chords for the song
Keyboard Dance Monkey	23/10/20	learn and practice the melody of the song.	RED AMBER GREEN	I learned the full song successfully on the keyboard, and can add my left hand.
Keyboard Dance Monkey	31/10/20	practice playing with both hands.	RED AMBER GREEN	I can play with both hands.
Keyboard Dance Monkey	07/11/20	play full hands together and play with the backing track	RED AMBER GREEN	I was able to play the full song with the backing track in time.
			RED AMBER GREEN	

Example 3

Pupil Target Profile Sheets.		Miss McHugh.		
Name: [Redacted]				
Instrument and piece	Date	Target	Traffic Lights	Reflective Comments.
Keyboard Dance Monkey	17/10/20	Learn the rhythm of the chords and the notes	RED AMBER GREEN	I can play the right notes but I need to get on the rhythm.
Keyboard Dance Monkey	23/10/20	Practice the rhythm of the chords	RED AMBER GREEN	I can now play the right notes with the right rhythm.
Keyboard D M	31/10/20	Learn the next part of the song (Melody)	RED AMBER GREEN	I can play the melody and now I can start to add the chords.
Keyboard D M	11/11/20	Play the Melody with the chords to play full song	RED AMBER GREEN	I am Green because I can play the full song.
			RED AMBER GREEN	

“Research suggests that self-regulation and achievement are closely related: Students who set goals, make flexible plans to meet them, and monitor their progress tend to learn more and do better in school than students who do not.” (Andrade, H. & Valtcheva, A. (2009)).

My results tie in nicely with this quote by Andrade & Valtcheva as the pupils were setting targets (goals), making them appropriate and achievable for themselves, and keeping records of the targets in the form of a sheet in order to monitor progress and be successful.

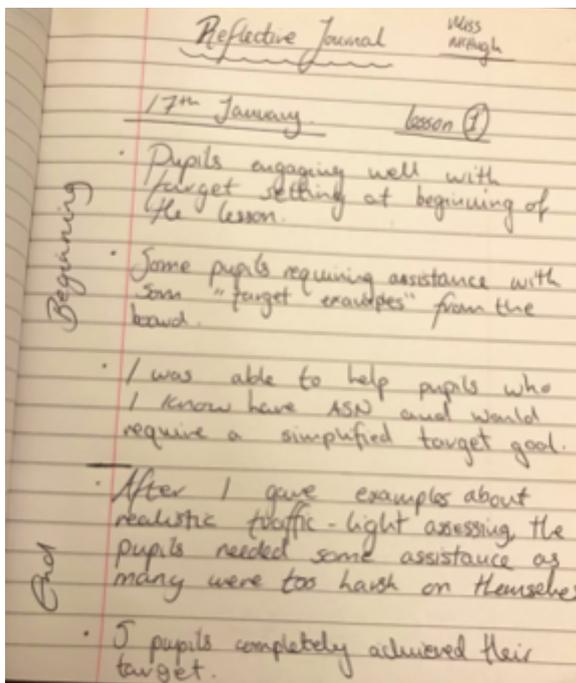
3. Teacher Reflective Journal

I observed how the 20 pupils engaged with the traffic light target sheets and how they responded to this Aifl, self-assessment strategy. On each of the five lessons, I noted how the pupils interacted with the sheets at the beginning of the lesson and then at the end. At the beginning of the first two weeks, some pupils who were needing assistance from myself to set their new targets. At week three, it was clear that pupils were more positive in their reflective comments about their progress as they moved away from Red and towards Green.

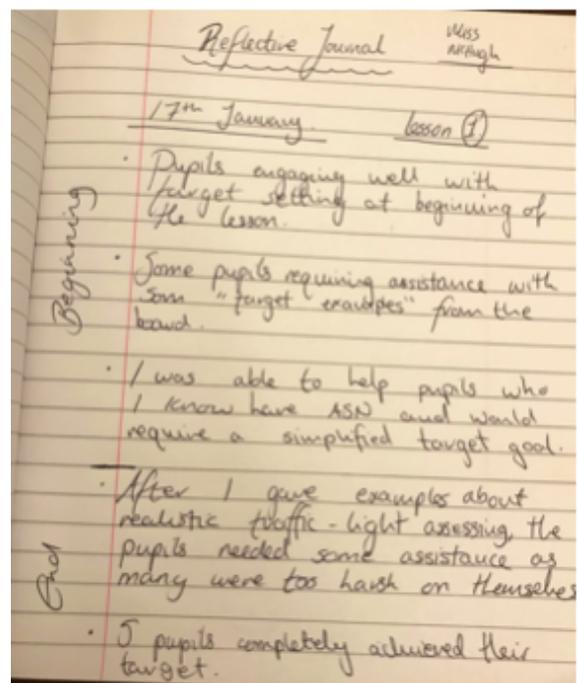
“Students' attitudes toward self-assessment tended to become more positive as they gained experience with it.” (Andrade, H. & Valtcheva, A. (2009))

This was true for the pupils in my class as they learned to assess their work appropriately and be more positive and optimistic in their reflective comments. Their attitude towards self-assessment increased as they were used to the routine of it.

Example 4



Example 5



Conclusion

The aim of the study was to enquire about the use of Traffic Lights in the classroom as a formative self-assessment strategy.

The results have indicated that pupils are more in favour of using traffic lights to self-assess their work in order to understand what the next steps in their learning are. The results also show that over a period of 4 weeks, 95% of pupils either remained the same colour for one week or moved up a colour every week until they were remaining at the high standard of Green. This demonstrated that self-assessment strategies can be a motivational method to

encourage pupils to take ownership of their learning. It can also be said that pupils were more honest and constructive about their work and were positive towards their next steps as they gained more experience of self-assessment.

Implications for Future Practice.

It is possible that the results may have been influenced by the young age range of the students (12-14 years) and their attitude and commitment to their learning. Perhaps the study could be more in depth by using a larger number of participants and use traffic lights in other subjects. A further enquiry could use another Aifl strategy such as '2 stars and a wish' to explore the comparisons and compare the pros and cons to both methods.

I will share these findings with colleagues and peers at Taylor High school towards the end of my probation year. My findings can be discussed at in-service days and at departmental meetings where appropriate. As an NQT Music teacher, this research has been invaluable for the preparation of lessons and the importance of incorporating formative assessment for the current generation of learners, to assist with pupils' awareness of their learning and their next steps are.

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