

# **Increasing Classroom Engagement and Outcomes through the Employment of Social and Emotional Learning Strategies in Year 9 Music Lessons.**

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## **Abstract**

When a group of students are on the path to underachieve, it can cause even an experienced teacher to question their own practice. In this case, that questioning resulted in action, in the form of a research initiative to enhance the social and emotional learning (SEL) skills of a cohort of year 9 pupils who displayed deficiencies in their everyday learning behaviours despite their academic abilities. The action research would take place solely within their weekly music lessons, delivered by myself as teacher-researcher. The focus was to improve pupil outcomes in line with departmental targets as well as reducing negative behaviour; some of which was affecting both pupil and teacher wellbeing. Through the study of both general and music specific research into SEL a series of intervention lessons were created that still supported the existing curriculum. Pupils were surveyed to assess their own social and emotional competencies both before and after the intervention sessions. These results were then analysed alongside teacher observation of classroom behaviours. The outcomes of this research showed some positive improvement in pupils' competencies resulting in increased academic success and a more pleasing classroom climate for learning. Pupils displayed a clear increase in Growth Mindset and Social Awareness as well as possibly developing a greater understanding of their own sense of Self.

## DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed: ..... (candidate)

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## STATEMENT 1

This dissertation is being submitted in partial fulfilment of the requirements for the degree of Master of Education.

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## STATEMENT 2

This dissertation is the result of my own independent work / investigation, except where otherwise stated.

Other sources are acknowledged by footnotes giving explicit references. A reference list is appended.

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## STATEMENT 3

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## Chapter One: Introduction

### *Context*

Many teachers will say that teaching is getting harder due to the behaviour of pupils. It is an easy statement to make but much harder to break down into something meaningful that can be addressed in practice. Whilst plenty of research exists around the field of classroom behaviour in the sense of disrupting learning, aggressive or defiant displays and so forth, less has been carried out on negative behaviours such as lack of engagement and independence, especially in higher ability, capable learners. The way in which we assess pupils and hold schools to account has been changing and a greater emphasis is now on the capped points score (Welsh Government, 2017). This means that schools have an extra incentive to ensure that all pupils achieve their maximum potential, not just the 'C grade' pass. It is in the push for more of the highest levels and grades that it has become apparent that not all of our 'well-behaved' learners are actually engaging in the learning process to the level required to meet their education potential within The School. After informal observation and discussion with colleagues about the areas of concern we have for these classes, a number of trends appeared.

1. A rapidly growing number of pupils are not engaged when they enter our classrooms and display poor interactions with staff. Some appear actively perturbed when a teacher asks them to stop talking or face the front ready to begin teaching. Low level behaviours such as audible sighing/yawning, eye rolling etc. are present in virtually every lesson.
2. Pupils do not actively listen to much of what is being delivered. Even when the instructions are quick and clearly delivered it is expected that at least one pupil will immediately respond with 'what do we need to do?' or similar when other pupils spring into action. This now joins the ever-present 'I don't know what to do' after a perfectly acceptable classroom discussion and demonstration as a sign of who wasn't really engaging with the *teacher* led aspect of the lesson and a general lack of responsibility over their own learning.
3. Pupils wait for the answers rather than having a go themselves; few easily engage in discussion or exploration of ideas required for effective musical appraisal (a skill required not only to appreciate music of others but also to enhance their own performing and composing work through critical reflection). The constant need for affirmation and the fear of taking risks is growing amongst all ability bands. In music lessons this equates to an ongoing need for pupils to

have the teacher check and listen to their work, giving continuous affirmation and probing possible improvements, which is virtually impossible in classes of 30+. Their ability to self-monitor, to self-assess and generally move forward with their own learning is limited to a very small number of self-confident learners with the rest seemingly being left behind waiting for reassurance before they'll move ahead.

The pupils causing the biggest concerns are in the upper ability sets meaning they are not lacking from our traditional understanding of intelligence. They are capable learners who are able to access the work given but are often choosing not to. Instead, each of these concerns fall into the pupils social and emotional skills (CASEL, 2015) This research will explore the area of Social and Emotional Learning (SEL) and its possible impact on the learning skills of year 9 pupils in a South Wales Secondary school through a series of subject based lessons within their Music curriculum.

The School has a mixed catchment of approximately 700 learners including sixth form. It has around 20% of pupils living in the 20% most deprived areas in Wales and has the highest number of pupils eligible for Free School Meals within the county; 10% above the national average (Welsh Government, 2019) I am employed as Head of Music and teach all but two of the music classes across the school including all of the pupils involved in this piece of research.

## ***Rationale***

It is important for both the Music Department and The School at large to increase the results of learners across each cohort. Part of the Departmental Improvement Plan for Music is to increase the proportion of higher level 6+ achieved by the end of year 9. This has been hampered by high levels of disinterest and/or disengagement from many of the upper set pupils. Lack of independence stalls the pace of learning and splinters the teachers time in supporting pupils to move forwards. Music is not a subject that can be completed by passively receiving information aurally or through transcription from a book. Pupils cannot 'pass' the course or reach their target level by regurgitating knowledge and box ticking a list of success criteria. In order to achieve in Music pupils *must* participate in active learning. Engagement and participation in lessons is essential in this process. Whilst 'spoon feeding' knowledge may be enough to succeed in other curriculum areas, at least in key stage 3 and possibly 4, it does put the burden of work onto the teacher and deprives pupils of the learning skills required for more advanced study in future. Enhancing pupils' ability to think and learn for themselves will benefit pupils across subjects.

Whilst schools have taken an interest in concepts such as Costa & Kallicks' Habits of Mind (2009) and Carol Dweck's Growth Mindset (Dweck, 2006) there is far more research on pupils' learning styles that has not made it directly into the hands of teachers. That is not to say that the aforementioned texts are not of value; they both offer strong ideas for enhancing pupils learning progress which will be utilised within this research. More so that they should be read alongside a wide and continuing wealth research in educational psychology and learning. Gardner's research on Multiple Intelligences (1983) expanded the view of intelligence from being one single, measurable concept (resulting in a linear scale where people were either intelligent or not) to a range of independent, yet interconnected, intelligences including two which directly relate to social and emotional attributes; interpersonal intelligence and intrapersonal intelligence. As seen in with my year 9 classes, pupils can score highly on academic tests yet lack both interpersonal and intrapersonal intelligences required to reach their full potential. Salvo and Mayer (1990) went on to detail emotional intelligence and its crucial role in cognitive development. This was again expanded on by Goleman (1996) who developed a wider description of both emotional and social intelligences (referred to by Salvo and Mayer as a *mixed model*, (Mayer, D, 2004)) which was the first to chart a list of five competencies. Whilst these five competencies have been reworked by later researchers they can still be found in use, albeit in an developed form, by the Collaborative for

Academic, Social and Emotional Learning, a leading organisation in the research and application of social and emotional learning in schools (Collaborative for Academic, Social, and Emotional Learning, 2015).

Music links naturally to social and emotional learning (Küpana, 2015) (Edgar, 2013). Performing and composing with others requires social skills in order to create an effective end product; working together, communicating both in decision making and performance, and evaluating for progression. Emotional intelligence is necessary if musical appraisal is going to look past the mathematical mechanics of sounds and theory. The effect of the composer's choices requires pupils to identify musical expressive qualities. A sense of empathy is required to fully appreciate the intention of the music and variety of ways that individuals can interpret this. It would make sense then, that if pupils' lack of social and emotional skills are preventing engagement and progress in music lessons, the subject is also in a positive position to develop these skills too.

### ***Aims***

There is mixed agreement on whether standalone subject interventions hold much value compared to whole school ones. Whilst most research promotes the infusion of SEL strategies into the existing curriculum it also expects it to be part of a wider whole school focus (Zins & Elias, 2007) (Zins, et al., 2007) (Collaborative for Academic, Social, and Emotional Learning, 2015) (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2017) But, in a time when finances are tight and the curriculum is overloaded, persuading staff to incorporate yet more aspects into their lessons is a daunting task. This study will aim to find out if any progress can be made in increasing social and emotional skills not only in one standalone lesson per week, but through a curriculum subject rather than a dedicated SEL session. Will this have enough impact to make a difference? If so, there would logically be some evidence to support its wider usage across more subjects. If not, where could the school go next?

The study will use eight music lessons to deliver social and emotional skills to year 9 learners whilst they complete their final assessed work of key stage 3. This is their final chance to work at, or above their target levels. For most of them it will be their last

opportunity to study music alongside their peers as only a small number opt for the subject at GCSE.

The aims of this research therefore will be to identify whether a series of standalone subject based interventions can:

- *develop pupils' growth mind-set in order to work more independently and to push themselves to a higher level of success.* This would support the department in reaching its target of raising Level 6+ attainment and enhance their overall learning abilities.
- *develop pupils' social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationships to be grown.* Success within this aim would create a better working environment and sense of well-being for both pupils and teacher. It would create a more effective space where pupils could ask for support and the teacher can both praise and constructively criticise learning in order to enhance success; without the fear of confrontation or disengagement.
- *develop pupils' emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work.* This would both improve their musical attainment towards higher levels and broaden their ability to evaluate their own and others work in a mature manner.

All three aims work together in both increasing academic success and providing pupils with personal skills required to succeed both within and outside of the educational system.

### **Summary**

This research aims to utilise the creative subject of music to enhance the social and emotional skills of secondary school pupils. By incorporating social and emotional learning strategies into the existing curriculum it hopes to demonstrate that every classroom and teacher can play a part in affecting these everyday attributes that our learners require to succeed throughout life. This document will first explore the existing research on social and emotional learning including its connection with music education.

It will then lay out the methods utilised to identify participants and carry out the research interventions. The findings will then be analysed and discussed in relation to the aims identified within this chapter. The research will conclude with a discussion on where to go next, the implications for my own practice and possible developments for the wider school.

## Chapter Two: Literature Review

### *Introduction*

This review of research will look at what we already know and understand about our current school climates, the development of research on intelligences and social and emotional competencies, followed by a look at the reporting of Social and Emotional Learning (SEL) programmes that are used within schools. This chapter will attempt to demonstrate the support for social and emotional learning whilst questioning its implementation within our schools.

### *Traditional Learning Theories*

Theories about how we learn have been around as long as education itself. Each has its supporters and its critics but most concern themselves with efficient acquisition of knowledge and understanding. Most are also reliant on, but not dedicated to, the pupils having some form of engagement in learning, with or without a tangible reward (Bates, 2016). When dealing with undesirable behaviours in schools, we often concentrate on fixing the symptoms rather than addressing the root cause (Adelman & Taylor, 2000). However, if pupils do not have the basic ability to listen, focus, engage or participate in lessons without (or, at times even with) constant physical reward, the use of any learning theories feels futile.

### *The Conflict of Educational Aims*

Within the education system we seem to hold academic achievement as our overall primary goal. This is despite the foreword in the current National Curriculum Guidance for every subject area stating:

*“Schools should develop in every learner a sense of personal and cultural identity that is receptive and respectful towards others.” (Welsh Government, 2008)*

This statement suggests that ensuring pupils have the personal qualities and ‘soft’ skills required to fulfil their life’s potential is part of the education process; schools’ should assist in developing this, not presuming it will grow naturally or be supported from home. The reality is that we do presume that pupils should enter our classrooms with the appropriate behaviours for learning and we do not value time spent on rectifying any perceived weaknesses in these personal attributes. If a competency cannot be easily measured and quantified as directly impacting test scores it doesn’t get the time or

resources of those of academic programs. (Zins, et al., 2007) (Gardner, 2007) The target driven accountability system, which judges a school on results through measuring success at level 2/capped points (Welsh Government, 2017), has put additional pressure on academic results. Grade boundaries prevent 100% of pupils achieving C+ so it's a somewhat broken system of schools being pushed to constantly raise the number of pupils getting over this threshold. If the C grade is set to 50%, for one school to improve their A\*-C percentage, another school *must* decrease to keep the national balance; the goal posts are literally moved to create equilibrium of results. There is also the fact that some learners simply *are* Level 1 (D-G grade) ability, else there would be no requirement for these grades. It does not mean these young people are incapable, just that on the day chosen for the exams/assessments to take place the knowledge and skills they had acquired were below the standard we prescribe to a C grade. Schools are therefore chasing their tails to drive up results in a system that is working against them, often focusing on a narrowing range of academic interventions and numeracy/literacy programs. However, there is growing research in the field on Social and Emotional Learning showing that if we only teach academics, we are likely to fail many learners.

So, what are schools doing to develop a more rounded learner? Whilst PSE or PSHE is stipulated as essential by the Welsh Assembly (Welsh Government, 2008) but with no guidelines on how this should be delivered. Timetabled PSE lessons have been removed in many schools, replaced with "break down" days with visiting providers. Whilst a wide range of topics are delivered from a variety of agencies these standalone sessions may not have the same follow-up and progression of a term's study with a classroom practitioner; especially one who really knows the learners involved.

The UK did previously focus on the issue with a curriculum programme called Social and Emotional Aspects of Learning (SEAL) (Department for Education, 2005). However, the resources produced by the Government in 2005 appear to have lost their usage after an evaluation report written in 2010 (Humphrey, et al., 2010). Their research found limited success with the program in meeting its aims, identifying one of the barriers as being allocation of time to deliver the program alongside competing pressures. Essentially, it was not being seen as important enough to dedicate time or resources to. This has also been found throughout SEL research including that of Adelman & Taylor (2000) and Zins et al. (2007).

But why does this matter? Do we need developed social and emotional skills to succeed? Dowling (2010) discusses the impact of poor social relationships going on to affect confidence, social skills, openness to learning and behaviour, and how this can impact on the quality of life in adulthood. She discusses how positive attachments at an early age help build the skills needed to secure new relationships throughout life. Children who struggle to gain adult care and attention in the home may require more in school. Schools are by definition social communities through both pupil-pupil and pupil-teacher relationships (Zins, et al., 2007). Therefore, the ability to use appropriate social interactions is essential in securing the most positive outcomes.

Goleman (1996) cites numerous examples where IQ has not helped secure more prosperous outcomes in adulthood if social and emotional skills are lacking. This is also noted by Zin et al. (2004) with the opposite also being true people with lower academic success or IQ but strong social and emotional skills can often exceed expectation.

Whilst general thinking may suggest that higher ability pupils will naturally have more developed social and emotional skills, Goleman argues “*Academic intelligence has little to do with emotional life.*” (Goleman, 1996, pp. 33-34). He goes on to define emotional intelligence as thus:

*“abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think’ to empathise and to hope.”*  
(Goleman, 1996, p34)

Family life is the first place that we develop our emotional from early infancy (Goleman, 1996) and young people who grow up without a mother figure are most at risk of underdeveloped emotional intelligence (Dowling, 2010). Initiatives such as Flying Start have been put in place to support early intervention in area of increased deprivation but this additional support on wellbeing doesn’t necessarily continue once the child moves into formal education, where the focus becomes academic.

## ***Intelligence and Learning***

Gardner (1983, 2006) defines multiple intelligences being present and interconnected with individuals being more naturally adept in particular areas. His definition of an intelligence is one that begins as a biological attribute but whose product is of cultural benefit universally; thereby distinguishing us from animals. Of these seven intelligences two of these directly relate to social and emotional skills:

*“Interpersonal intelligence builds on a core capacity to notice distinctions among others – in particular, contrasts in their moods, temperaments, motivations and intentions.” (p15)*

This refers to how well pupils can relate to each other and is essential skill for not only participating in peer group work but also in their interactions with teachers. The pupils in my classroom often have difficulty maintaining group projects. They may either argue and fall out before completion or not have the required skills to start interactions in the first place. Many also have difficulty interacting with myself as teacher; overreacting to simple requests for compliance or talking over the information being delivered to support learning; what many of us would consider basic manners. Whilst some can pick up on body language cues to adapt their current behaviour ('the look', hand gestures to turn around, teacher proximity as a cue to return to task) some genuinely appear to lack understanding of the actions of those around them. The frequent example of a pupil being upset upon arrival to a lesson and another shouting across the class that “she’s crying” demonstrates their lack of subtly and empathy of others’ feelings.

The second intelligence that Gardner includes is intrapersonal:

*“...knowledge of internal aspects of a person: access to one’s own feeling life, one’s range of emotions and eventually label them and to draw them as a means of understanding and guiding one’s behaviour.” (p17)*

This links to resilience in learners to manage their own behaviours through the pressures of daily life. People with a lower intrapersonal intelligence may struggle to manage their own emotions, either by retreating inwardly and becoming detached and hard to engage, or they may lash out with anger and frustration. In a time of austerity, with rising unemployment and ‘workless households’ in the local area compared to national trends (Office for National Statistics (ONS), 2019a, 2019b) with increasing reports of domestic incidences being disclosed by the community policing team (Office for National Statistics (ONS), 2019c), it is no surprise that an increasing number of our pupils are dealing with

huge pressures in their young lives. These societal trends have been noted in the literature:

*“More than ever, students are faced with uncertainty in their daily lives and in their futures, and many feel a sense of insecurity, disenfranchisement, disillusionment, and even fear. For all of these reasons, SEL is perhaps more important than ever as an essential component of school reform.”*

(Zins & Elias, 2007, p. 237)

Is it surprising then that our pupils struggle to concentrate in class, or do not see our curriculum offering as important in relation to their whole-life picture? Asking them to focus on learning some keyboard chords seems somewhat irrelevant when there is no food at home, yet we as professionals know that educational success can help them to get out of the cycle of poverty over time.

Gardner discussed that whilst individuals may be naturally more adept in some intelligences than others, none of these need to be fixed. A person can increase their intelligences by working on the skills contained within them. For many of the intelligences this seems quite straight forward. To improve in verbal-linguistic intelligence we can increase our study of linguistics. For musical intelligences we can participate in learning an instrument, complete aural training and so forth. What might development look like for intrapersonal and interpersonal intelligences? How can we develop our empathy for others and our control over ourselves without just alluding to ‘positive thinking’? Goleman continued the exploration of these areas beyond just the two broad intelligences into competencies that can more easily be broken down and facilitated within learning programmes.

### ***Social and Emotional Competencies***

Goleman came up with five connected competencies for emotional learning that are still used in SEL programs today (albeit with slight variations of terminology) (CASEL, 2003)

- *Emotional Self-Awareness*
- *Managing Emotions*
- *Harnessing Emotions Productively*
- *Empathy: Reading Emotions*
- *Handling Relationships*

(Goleman, 1996, pp283-284)

A similar five were developed a couple of years later by Elias et al (1997) and are interchanged with the original throughout later research and SEL programs (Zins, et al., 2007) (CASEL, 2015) (Kidron, et al., 2016)

- *Self-awareness*
- *Self-management*
- *Social awareness*
- *Relationship skills*
- *Responsible decision making*

(Elias et al., 1997, p646)

The first two refer to the skills that affect our “self”; the following two affect our relationships with others whilst the final one concerns our rational thinking and behaviours. Each of these areas can be developed and are required to enhance the whole person. **Self-awareness** includes a person’s ability to recognise their own feelings, abilities and competencies as they are at that moment. Having a realistic appreciation of their own self enable them to consider both where they’ve been and where they are going. Pupils who undervalue themselves may not push themselves to their full potential, and those who over-estimate their current abilities may find it difficult to understand why they haven’t achieved a goal in the way they planned to. This competency links to the first aim of the research: to develop pupils’ growth mind-set in order to work more independently and to push themselves to a higher level of success. **Social awareness** is our ability to appreciate other people’s feelings and opinions; recognising differences without judgement and showing empathy for others. This is essential in maintaining positive relationships and being able to work collaboratively. This competency links to our second aim: to develop pupils’ social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationship to be grown. **Self-Management** refers to our capacity to manage our own emotions; acknowledging our feelings but not letting them overwhelm us. Essentially it is our level of resilience towards frustrations and our ability to preserve over long-term goals – something that I believe is in rapid decline amongst our pupils. Whilst this competency does not correlate as directly with a particular research aim, enhancement would affect their overall positive behaviours within the classroom, thereby impacting on all three aims. **Relationship skills** enable us to establish healthy relationships for working and socialising together; avoiding peer pressure, resolving conflicts maturely and not resorting to putting others down to better themselves. This competency relates to the second aim but also to the

third aim: to develop pupils' emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work. Enhancement in this area would allow pupils to respect the differences in each other's appraisal of music as well as to maturely peer assess. **Responsible decision making** demonstrates the ability to make informed, accountable decisions that consider multiple sides and can be justified against other potential solutions. Again, this competency does not have a direct link to the research aims but development would assist with pupils working independently for aim 1, as well as making sensible decision about their interactions alongside the other competencies. It is not possible to totally isolate each of these areas in order to develop only one as they are interconnected. It is predicted that if the interventions are successful there could be development across competencies that are not the specific focus of the research. Each of these five competencies can be seen as referring to behaviours that will assist not only in a young person's time at school but will be essential to progressing through working life and future adult relationships.

### ***Social and Emotional Learning Programmes in Schools***

So, what role should schools play if the factors affecting social and emotional learning are external to our institutions? Zins et al. (2007) states that

*"... student's social and emotional development is not an additional duty charged to schools to schools along with academic instruction, but rather is an integral and necessary aspect to helping all students succeed." (p193)*

We not only have a moral reason to consider this; the evidence shows that there are effective interventions that schools can employ that will deliver improved outcomes for young people over all aspects of development and academic success.

*"...when schools attend systematically to students; social and emotional skills, the academic achievement of children increases, the incidence of problem behaviours decreases, and the quality of the relationships surrounding each child improves." (Elias, et al., 1997, p. 1)*

Evidence shows that schools which implement SEL programs have better outcomes than those who do not; even when teaching and resources are equal (Elias, et al., 1997). This raises the question as to why the SEAL programme in the UK ceased to be. However, most educational practitioners will recount the number of initiatives that have come and gone over the years as a new scheme takes precedence. In this particular case, the evaluation report (Humphrey, et al., 2010) was published shortly after a change of

Government which included a huge upheaval of both Government departments and school curriculum. The report even includes a footnote stating that the content may not reflect current policy and distances itself from the contents. Whilst the report found that the success of the programme was at best limited, their investigation found that implementation of the programme appeared to be an overwhelming issue. Lack of 'buy in', staff training, restraints on time and resources were all areas of concern in the delivery of the programme. CASEL (2003) also identifies a number of barriers towards successful implementation that need to be addressed before a programme commences, including time, resources, support and staff development. Regarding what an effective SEL programme should contain, most of the identified areas are linked to implementation rather than programme content.

CASEL's 2017 report continues to develop the themes of successful implementation through systematic integration of SEL through ongoing district wide, school wide and classroom-based strategies alongside community and family links. They also identify the need for staff to develop their own social and emotional skills in order to create the necessary climate and relationships to model and embed social and emotional skills for their learners. I will need to take this into consideration when administering my own strategies; my delivery and personal skills will affect the outcomes of the interventions for these learners.

Whilst some research looks at the necessity for staff to be fully trained in SEL before implementing a programme (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2003) (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2017) (Zins & Elias, 2007) (Zins, et al., 2007), other research focuses on the necessity for teachers to have developed their own social and emotional skills. Schonert-Reichl (2017, p139) reports that *"Teachers' social-emotional competence and wellbeing strongly influence learning context and the infusion of SEL into classrooms and schools"*. Thus, suggesting that staff may need to consider and enhance their own skills before attempting to support pupils in their own development. Harmann et al. (1998) discuss the teacher's effectiveness and how they are able to relate to pupils, to engage them and draw on their personal interests to enhancing learning within the music classroom. They go as far as recommending that these skills be included within initial teacher training programmes, as does Edgar (2013). Edgar consider it beneficial to both pupils and teachers to include high quality and ongoing professional development regarding social

and emotional learning strategies. This area of research will be of utmost importance as I consider how I will deliver the SEL interventions and whether I need to improve my own skills first.

Another substantial success factor for the research will be the limit of the interventions to one lesson per week in one subject. Researchers including Zins & Elias (2007) and Zins et al. (2007) support the infused approach whilst advocating for it to be part of a whole school programme. CASEL's (2003) document outlines many of the different variables an SEL programme may take; including that of 'Academic Intervention Strategies'. This area looks at whether an SEL programme is being delivered as part of stand-alone SEL activities, embedded curriculum activities and changes in teaching practices. They also look at the scope of programmes to be school wide and community inclusive, neither of which are within the scope of this research but need to be considered when looking at the effectiveness of existing programmes. Unfortunately, those programmes identified as having integrated SEL within curriculum teaching offered limited evidence to demonstrate their effectiveness. A later analysis of SEL programmes offered by CASEL (2015) identifies that curriculum based SEL strategies are more commonly used in middle and high school teaching and within these there is evidence of academic improvement and some progress in behaviours. It is also interesting that each of these programmes includes staff training and support in their delivery and assessment.

### *Social and Emotional Learning and Music*

Music education, social skills and emotional skills are intrinsically linked (Küpana, 2015) (Edgar, 2013) (Jacobi, 2012). The process of experiencing, performing and creating music with others is clearly one requiring social skills. The art or interaction along with empathy for others is required for both performance and critical discussion. Pupils can learn to co-operate and compromise, learning to view experiences from other pupils' perspectives (Jacobi, 2012). Opportunities for development of emotional understanding are also plentiful:

*"Firstly, music can be used as an emotional stimulus by listening to recorded music and discussing its emotional qualities. This can be used to expand students emotional vocabulary and develop their ability to discuss emotions."*

(Edgar, 2013, p. 30)

The intervention sessions within this research will build upon the natural opportunities available within music education.

### *Summary*

The research is clear in its support of social and emotional learning having a positive impact on pupils' immediate and long-term success. Whilst it is clear from each of these reports that systematic whole school and community linked programmes that incorporate family support are the most effective, there is also some evidence that curriculum-based interventions can have an effect on pupils' academic success and demonstrable behaviours. Will it be possible then, to improve the attainment and classroom behaviours of my year 9 pupils purely by using SEL strategies within their one-hour a week music lessons? Will pupils be able to identify changes in themselves? Will I as their teacher notice a difference in both the quality of their work and in their classroom interactions?

## Chapter Three: Methodology

The research is aiming to develop the social and emotional learning skills of year 9 pupils in order to raise academic attainment in music and improve overall personal skills. The three overarching aims are:

- *develop pupils' growth mind-set in order to work more independently and to push themselves to a higher level of success.*
- *develop pupils' social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationships to be grown.*
- *develop pupils' emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work.*

Success will be measured in an improvement in the standard of work produced and a change in the classroom climate due to increased positive behaviour.

### **Research Methods**

After reviewing the literature and current research available on Social and Emotional Learning I decided to undertake small-scale action research allowing me to evaluate the effectiveness of embedding SEL strategies into my Music lessons. This would be done by delivering a series of pre-planned intervention lessons. The discussion of action research by Cohen & Manion (2011) as a combination of inquiry, action and reflection is particularly attributable to this project. As discussed in the literature review, the social and emotional skills of the teacher are important for successful delivery of an SEL programme. Therefore, as a teacher-researcher I will need to fully understand and appreciate the existing research; to implement these strategies within myself as well as actioning strategies with the pupils. Continual reflection of my practice will be critical, the pupils will have some level of autonomy within the intervention lessons so each class will end up with a somewhat unique programme. However, in order to maintain the SEL aspect I will need to evaluate each session as they progress and carefully align pupils with the overall aims.

### *Interventions lesson and content*

In designing the intervention teaching resources, I used considerable elements from the UK Government's SEAL programme<sup>1</sup> and adapted them to fit in with the music curriculum topic of song writing. Incorporating existing resources would assist with construct validity (Cohen, et al., 2011) as an evaluation of the effectiveness of this scheme has already been undertaken (Humphrey, et al., 2010). Whilst their evaluation found mixed success from the programme the findings considered that process and implementation were responsible rather than the resources and pedagogical principles; the latter correlating closely with my own review of the literature. The SEAL resources aligned with Goleman's original five domains (Humphrey, et al., 2010, p. 5) rather than those identified by Elias et al. (1997, p.646), however, I considered there to be adequate correlation to utilise them within the intervention materials for this research. Research suggests that music is a natural pathway into social and emotional learning through collaborative participation in performing and composing tasks, alongside the emotional skills required to appraise recorded music (Jacobi, 2012), (Edgar, 2013), (Küpana, 2015). Therefore, the lessons would start by exploring emotions through pupils' experiences of listening to music before undertaking a task to work with others on composing a song. The song would also be based on a social issue of their choice in order to further develop their engagement with the topic, their connection with the learning materials, and their emotional attachment and understanding of the work.

### *Intervention Session Outline of SEL opportunities:*

**Session 1** – recognising emotions through the use of SEAL resource photographs  
APPENDIX A. Listening to music and identifying the emotional intention of the music and the purpose of the music.

**Session 2** – listening to music of teacher choice, anonymously identifying (through classroom voting system) the any existing emotional links to these songs and/or any new reactions to these songs. Analysing song lyrics and their meaning and comparing to the mood of the musical style.

**Session 3** – listening to music of pupil choice, anonymously identifying (through classroom voting system) the any existing emotional links to these songs and/or any new reactions to these songs. Class discussion of how music means different things to

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<sup>1</sup> This programme includes multiple resources all of which were archived on 9<sup>th</sup> August 2011 and were accessed & downloaded on 27<sup>th</sup> February 2019 through the National Archives:  
<https://webarchive.nationalarchives.gov.uk/20110809155339/http://nsonline.org.uk/inclusion/behaviouratendanceandseal/seal>

different pupils linked to personal preference, prior memories, culture, upbringing. Wider discussion on respecting peoples' differences.

**Session 4** – exploring the use of music for political purposes; focus on protest songs across the decades. The power of music for social change despite people's different tastes.

**Session 5** – selecting a topic of interest by individual pupils. Group discussions around topics and work on how to write lyrics using general music teaching techniques.

**Session 6** – Linking or contrasting the mood of the lyrics and music. Exploration of musical features of song writing. Further work on lyrics.

**Session 7** – SEL strategies limited to starter discussion on pupils discussing their choices so far and then peer assessment of work so far at the end of the lesson. Pupils target set for next lesson.

**Session 8** – Use of own targets to complete work and self-assess outcomes. Completion of Panorama survey for the second time.

The initial survey was completed the week before the interventions during which time the project was outlined and discussed, consent forms were distributed for pupils and parents. Pupils who did not wish to take part did not complete the survey (or it was later withdrawn) but still continued the eight teaching sessions with the rest of the class. None of their data was included in the research.

All sessions included a focus on respecting each other's opinions, giving pupils time to talk, positive comments to each other only (critical constructive feedback was fine as long as it was not a personal attack) and lots of praise where appropriate. Sessions were kept flexible with pupils choosing musical examples meaning that each class had a somewhat individual flavour after the initial two sessions. This was important for engagement and for pupils to feel ownership of this learning. Pupils choosing their own protest topic was also essential so they could really relate to what they were talking about; traditionally I, and many other music teachers, have prescribed a topic such as 'bullying' or 'drugs & alcohol' regardless of whether pupils care about it or not.

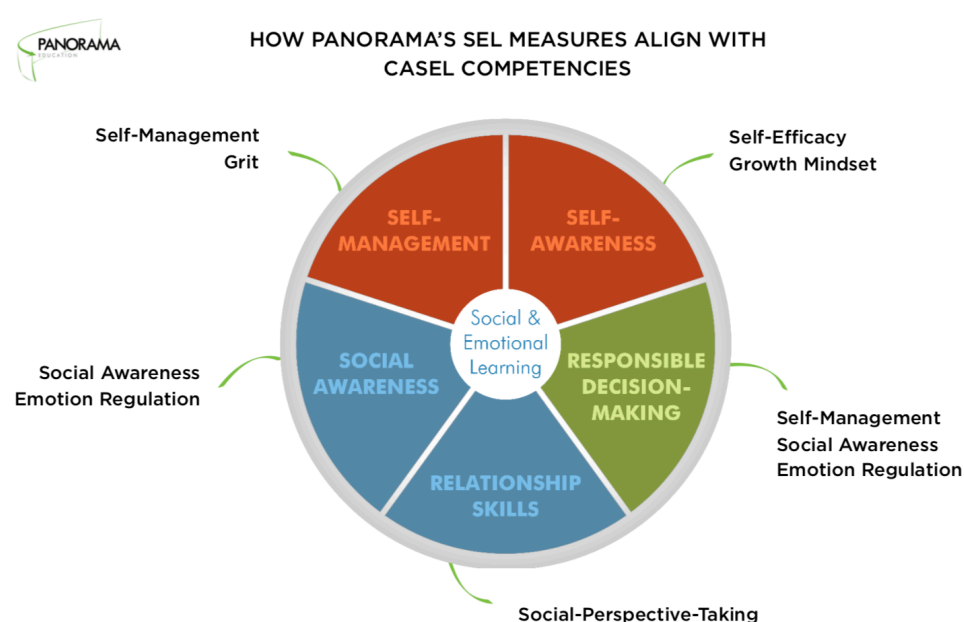
I was careful to reflect on my own interactions with the classes and pupils throughout the sessions and gave some of my own personal stories as a way of breaking down barriers. Discussing how music made me feel, both happy and sad examples, creating a sense of vulnerability at times, in order to ensure I was not asking something of them that I was not prepared to deliver myself.

Responses from pupils were not always verbal. Computer based learning software allowed pupils to anonymously send written responses and vote for responses that were displayed centrally. This was to engage pupils who are not comfortable speaking out in front of classmates, especially when discussing personal opinions that they may have been judged on. Work was only shared with the whole class with the permission of pupils, again to create that two-way respect that they were not going to be humiliated in front of their peers.

### ***Data Collection***

The research included two main methods of data collection. The first would constitute a pre-/post-test in the form of a survey exploring the pupils social and emotional skills before and after the interventions. The nature of the tests being a survey differs to that which would occur if pupils were being administered an academic test, presenting different issues around validity and reliability. The validity and reliability of the survey was maximised by using the Panorama Social-Emotional Learning Survey (Panorama Education, n.d.(b)) which is a well-established resource in measuring SEL behaviours. This was reviewed against Panorama Education's self-produced report detailing the validity and reliability of the questionnaire (Panorama Education, 2016). The survey has been designed to cater for different age groups allowing for suitable questions to be selected for year 9 pupils. It splits the survey up into sections linking to the five domains identified by Elias et al. (1997):

Diagram 1 – How Panorama's SEL Measures Align with CASEL Competencies



(Panorama Education, n.d.(a))

Consideration was given to the size of the questionnaire and the engagement levels of the learners at this point in time and I decided to minimise the amount of questions delivered within the survey whilst still gaining enough information to evaluate the interventions. Out of the recommended categories I selected Grit, Growth Mindset, Self-Management and Social Awareness, leaving out Self-Efficacy. This was due to the fact that the questions in Self-Efficacy section referred to *'work'*, *'complicated ideas'* and *'material presented'* and I did not feel pupils would be able to reliably relate these to the type of learning we utilise within the Music classroom. Also, the final question related to *'next year'* when most pupils would not be studying the subject. Therefore, this section would not demonstrate valid responses in relation to the research aims.

The Grit and Growth Mindset categories would link to the first research aim: *'develop pupils' growth mind-set in order to work more independently and to push themselves to a higher level of success'* as learners will need to be persistent in their learning and believe in their own success. Self-Management would link closest to the third aim *'develop pupil's emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work'*, developing a greater understanding of their own emotional state. Social Awareness would also link with the third aim as well as the second aim *'develop pupils' social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationships to be grown'*, a skill area that causes great conflict within lessons.

The second method of data collection would use my own observations as class teacher via the accumulation of behaviour points utilising the already established 'Class Dojo' software. This software can be used to allocate positive and negative points for demonstrating productive/disruptive classroom behaviours. There will also be qualitative feedback from myself as the class teacher on both the classroom climate and the learning assessment that the pupils were asked to complete; the song-writing task. The inclusion of this second data collection would provide methodological triangulation and thereby serve to strengthen the validity and reliability of the research (Cohen, et al., 2011, p. 196). However, there are increased risks with the reliability of observational data compared with other data collection methods. The biggest of which is the nature of the relationship between me, the pupils and the research. The Class Dojo system was chosen as the method of recording observations in an attempt to mitigate my own researcher bias. Cohen et al. (2011, p. 37) discuss the role of researcher as participant within the field of critical theory which aligns with the need to make a change within my classroom using my techniques, rather than an outside observer. I will be part of the

process throughout, as the teacher delivering the interventions and as the observer of pupil learning behaviours. This will allow me to appreciate many of the various contextual and complex variables that combine to determine the outcome of this research. Whilst this will reduce the external ecological validity of the research it will retain its validity within the scope of its own aims for my classroom practice.

Within the Class Dojo software, points can be allocated for a range of reasons. I adapted the headings to align closer to the SEL competencies whilst being relevant within the classroom context. After considerable thought and reading of the research and guidance with regards to Grit and Growth Mindset I decided that some of the regular classroom behaviours displayed by pupils are ambiguous as to which category they should fall into. As such, I have counted them within both categories for analysis. Whilst I did not count them twice when totally the number of points given, when looking at each of the competencies in isolation they were included in both discussions. I am aware that this will affect the overall reliability for many readers but it reflects the subjective nature of classifying 'real world' classrooms behaviours.

**Table 1: Class Dojo points categories for teacher observations**

|                  | Positive Points Awarded for...                                                                                                                          | Negative Points Awarded for...                                                                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grit             | <ul style="list-style-type: none"> <li>• Demonstrating Effort</li> <li>• Making Decisions</li> <li>• Persistence</li> <li>• Solving Problems</li> </ul> | <ul style="list-style-type: none"> <li>• Non-participation/non-completion of work</li> <li>• Relying on others instead of trying</li> </ul>                                                  |
| Growth Mindset   | <ul style="list-style-type: none"> <li>• Demonstrating Effort</li> <li>• Persistence</li> </ul>                                                         | <ul style="list-style-type: none"> <li>• Non-participation/non-completion of work</li> <li>• Relying on others instead of trying</li> </ul>                                                  |
| Self-Management  | <ul style="list-style-type: none"> <li>• Listening to peers</li> <li>• On Task</li> </ul>                                                               | <ul style="list-style-type: none"> <li>• Disrespectful response</li> <li>• Low level disruption</li> <li>• Not following instructions</li> <li>• Off task</li> <li>• Shouting out</li> </ul> |
| Social Awareness | <ul style="list-style-type: none"> <li>• Positive Comment to a Peer</li> <li>• Responding well to feedback</li> <li>• Teamwork</li> </ul>               | <ul style="list-style-type: none"> <li>• Arguing with group</li> <li>• Ignoring feedback</li> <li>• Negative comment to a peer</li> </ul>                                                    |

The points were recorded for two lessons before the interventions started, and in the final two weeks of the interventions, allowing a gap in-between where pupils could change their behaviours. This would give a clearer picture of any differences whilst

avoiding having 'too much' data to handle if we were looking for lesson-by-lesson changes over the 8-week period.

### *Research Schedule*

The intervention lessons were to be delivered in the Spring term and would need to fit in with their prior learning of the Music curriculum too. The first lesson would involve the completion of the questionnaire followed by the first intervention session. The eighth lesson would involve them completing and handing in their song-writing task before completing the questionnaire for the second time. The teacher behaviour points would be points would be collected from the half-term before the interventions and during the 8 weeks of the intervention lessons. The week following the interventions would give opportunity for pupils to be debriefed and ask any relevant questions before analysis of the data was undertaken.

### *Sample*

The sample will include pupils from the top three ability sets in year 9. This year group was chosen as they represent a cohort of pupils who have been challenging to engage throughout key stage three. If progress can be demonstrated by this selection of particularly challenging learners than it could be presumed duplicable with pupils in similar sets in other year groups, although probably to varying extents. The sample was limited to the top three ability groups for a number of reasons; the lower sets already undertake multiple interventions for both academic development and behavioural, social and emotional skills. Also, the lower sets drop significantly in reading age meaning that the completion of the CASEL self-reporting questionnaire would not be possible without significant assistance. This would have increased the level of potential bias from the staff members assisting, albeit unintentionally. There was also a possibility that pupils from those sets would not truly understand the nature of the questions being asked and so simply guess a proportion of the questions. Additionally, there was an ethical dilemma in that the pupils in the lower sets may not fully appreciate the purpose of the research in order to give consent. These risk factors did not apply in significant levels to the upper sets who have age appropriate reading ages and the capacity to understand both the questionnaire content and the purpose of the research for consent. All pupils in the upper sets were invited to participate in the research as the data collection methods allowed for the number of learners in those classes (a maximum of 90 pupils) being well above the recommended minimum sample size of 30 (Cohen, et al., 2011). The final sample included those pupils who consented to participate and also had the consent of

their parents/guardians to do so, the overall total being 62 pupils. The class split was Set 1: 20 pupils, Sets 2 & 3: 21 pupils each; this meant that each class dipped below the ideal number of 30 but the difference between Sets was a secondary consideration that may contextualise any overall trends. There is a risk on the validity of the results due to around a third of each class not participating due to lack of consent (either due to personal preference or failing to return parental consent forms). For instance, if a particular subset of pupils were the ones not participating (e.g. the pupils with particularly high/low SEL competencies). However, it is considered that this level of analysis is beyond this small-scale research given that this would require investigation of pupils initial SEL competencies before consent was ascertained and therefore ethically unsound. Therefore, the validity of data obtained from the participating pupils is deemed adequate for meeting the given aims.

### *Ethical issues*

BERA Guidelines (2018) have been consulted prior to planning the research and will be consulted regularly throughout the research period to ensure compliance. I have also consulted the University's "Research Ethics & Integrity Code of Practice 2017-2020" (UWTSD, 2017-20) outlining both the ethical responsibilities of the researcher and the University's ethics process which this form is a part of. As the research involves children, I have also ensured that it complies with the seven commitments outlined the ERIC charter (Centre For Children And Young People Southern Cross University, 2019). I have ensured that the research's purpose is for the benefit of the pupils and that their best interests are at the heart of it. I have aimed to minimise the risks to participants in all areas. Pupils are not being named at any point within the research and analysis of their given data is in a generalised form.

As the participants are between the ages of 13-14, informed consent will be obtained from both them and their legal guardians. This will be in the form of an explanatory letter and signed consent (APPENDIX B). Before starting the research, pupils were given an overview of what the research was about, the form it would take and what would be done with the information they gave. Details were given about the difference between participating in their music lessons over the eight-week time frame and participating in the research through completion of the questionnaire and inclusion of their ClassDojo points. It was explained to pupils both verbally and in written form that participation was completely voluntary and there would not be any consequence for either participating or not-participating (i.e. neither reward nor sanction). Pupils were also reminded throughout the research period, especially at the end of the eight weeks, that they could withdraw their consent at any time.

Further details about the collection of data, GDPR compliance, personal risks and risk to validity are discussed within the Ethics Form in APPENDIX C.

### ***Conduct of the Research***

The research was implemented as planned with 61 of the pupils participating after consents were gained. The second questionnaire was delivered in the same session as pupils complete their song compositions which resulted in both tasks being a little rushed. With hindsight it could have been better to complete this in the following session in combination with the given debrief.

Recording teacher observations was more pressured than expected. Despite this being the regular tool used for monitoring classroom behaviours I had a heightened sense of awareness that these particular observations mattered for validity. I was keen to avoid a bias in favour of the research aims but also concerned with being as fair and accurate as possible. Again, with hindsight I might have recorded the lesson and reviewed the footage with a colleague in order to increase the reliability of my judgements.

A copy of the pupil survey can be found in Appendix D and screen shots of the teacher observation tool 'Class Dojo' in Appendix E.

### ***Presentation of Data***

The data collected from the pupil surveys can be found in Appendix F.

## Chapter Four: Analysis of findings

### *Process of Analysis*

The collected data was analysed by comparing pupil responses before and after the intervention lessons. The data for all pupils was also compared to the data for each of the three classes in order to check consistency and validity of the research based on each class having had their own personal experience of the intervention resources.

Firstly, the responses were scored from 1-5 with 1 being the most negative response and 5 being the most positive. This was then averaged across each survey section to give an overall score for each learner and then the average for the whole cohort, both before and after intervention. Each of these scores would be out of five. This method of results measuring is used by the Panorama Survey (Panorama Education, n.d.(a))

Secondly, each question had five possible answers scaled from a negative response (e.g. Not at all) to a positive response (e.g. Almost always). As well as looking at movement between each of these responses I analysed the overall movement from the two most negative responses, through to the central response which I've termed to be 'neutral', into the most positive two responses.

**Table 2: Example of data analysis process.**

**G1 How often do you stay focused on the same goal for several months at a time?**

| <b>All</b>        |        |       |       |       |
|-------------------|--------|-------|-------|-------|
|                   | Before |       | After |       |
| 1-Almost Never    | 3      | 4.8%  | 1     | 1.6%  |
| 2-Once in a while | 14     | 22.6% | 14    | 22.6% |
| 3-Sometimes       | 27     | 43.5% | 23    | 37.1% |
| 4-Frequently      | 15     | 24.2% | 12    | 19.4% |
| 5-Almost Always   | 3      | 4.8%  | 12    | 19.4% |
| Positive (4&5)    |        | 29.0% | 9.7%  | 38.7% |
| Negative (1&2)    |        | 27.4% | -3.2% | 24.2% |
| Neutral (3)       |        | 43.5% | -6.5% | 37.1% |

This has allowed me to see whether there has been a general shift in feeling after the intervention and was especially useful in looking at the class responses where the numbers of respondents were smaller thereby affecting the percentage per pupil. I can also easily see whether the group or a class was particularly positive or negative before the interventions which would impact on the amount of room for improvement when compared with other questions.

The overall data has also been displayed throughout the Appendices G-J in table and graph form to visually identify any shifts. Looking at the same data through different lenses has allowed me to notice and reflect on more specific trends (especially between classes) than only looking at the overall scoring, as suggested by the Panorama survey itself (Panorama Education, n.d.(b)).

With the teacher responses accumulated via Class Dojo, the responses were grouped to correspond to the sections of the Panorama survey: Grit, Growth Mindset, Self-Management and Social Awareness (Appendix K). Both the pupil and teacher responses are then discussed in relation to the three research aims.

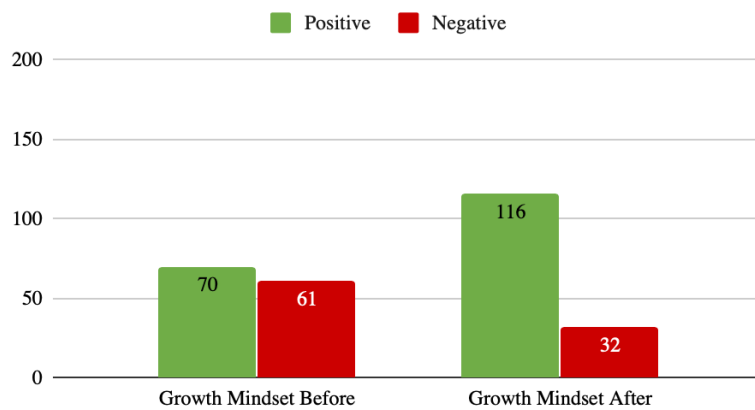
Whilst both sets of data (teacher and pupil) are collected using quantitative methods, consideration of mixed method models has been undertaken with regards to the data analysis (Cohen, et al., 2011) (Creswell, 2009). The data will be analysed in a qualitative nature as the observations pupils made of themselves, and those made by myself as teacher, are rather subjective and qualitative in nature. We are not here measuring test scores or concrete scientific facts. In fact, repeating the surveys days or weeks later, or observing the pupils an hour later in a different subject, or a week later in the same subject, would likely yield at least slightly different results. Therefore, the analysis will be looking for wider trends, patterns which support previous literature and anomalies to the contrary. It would not be beneficial to limit the discussion to a focus on percentage points.

### *Discussion*

Aim 1 was to *'develop pupils' growth mind-set in order to work more independently and to push themselves to a higher level of success'*. This aim primarily links to the Growth Mindset section of the pupil survey Appendix G but with some impact from Grit and Self-Management.

Before intervention pupils' average survey score for Growth Mindset was 3.09. This increased to 3.45 after invention; an increase of 0.36. This improvement was supported by teacher observations which rated 53% of all Growth Mindset points as positive before intervention compared to 78% of these points being positive after; an increase of 25%.

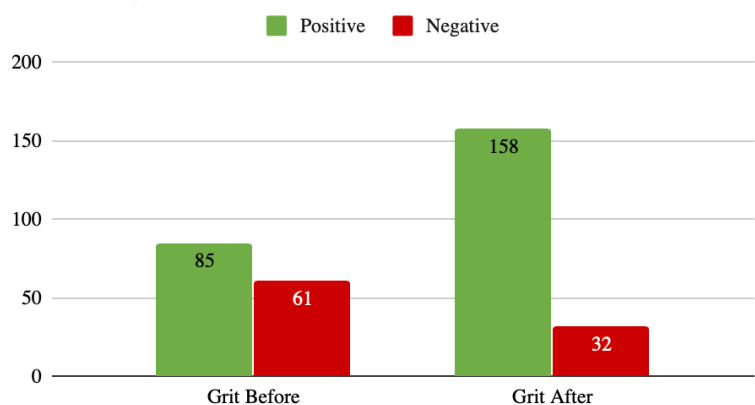
### Class Dojo Points Awarded for Growth Mindset



Growth Mindset observations focused on effort and persistence which were greatly improved after the interventions. Non-participation dropped which contextually meant pupils were answering questions, getting involved in discussion and simply 'having a go'. There was a big reduction in pupils relying on others to complete the work in paired situations, although this did at times have implications for arguing instead.

From teacher observation, Grit also increased by 25% with the pupil response score rising by 0.26. This focused on pupils demonstrating greater effort and persistence in their work which both teacher and pupils identified.

### Class Dojo Points Awarded for Grit



Looking within the pupil survey responses, two areas in particular stood out within the Growth Mindset (GM) results. Pupils in all classes developed a more positive mindset towards being able to change one's intelligence in Growth Mindset. It is pleasing to see that the focus on each of them being able to achieve well seems to have had an impact in this area of thinking. In class discussion they seemed quite open to intelligence meaning how much somebody knows and could do, rather than it being a given biological status. I find it interesting that pupils were so receptive to this given that they are taught

almost all of their lessons in ability sets throughout their time in school. It may also be relevant that the school frequently move pupils between Sets if they are not achieving their targets, therefore, pupils may not see their abilities as fixed compared to pupils in school where ability groups stay relatively concrete regardless of under or over achievement.

Whilst Dweck (2006) considered that higher ability and gifted learners may have more of a fixed mindset (therefore we may expect a lower movement from Set 1 pupils), more recent research by Mofield and Peters (2018) argue that this is not necessarily true. Like our results, they found that more able learners can develop a Growth Mindset, especially when the language of praise focuses on effort rather than innate ability. Their study also touched on the fact that higher learners may struggle more with the concept of developing 'giftedness'. This could explain why pupils' responses in our research found that pupils did not believe so much that a person's talent could be changed. Dweck (2006) also discusses how talent or 'artistic ability' is more likely to be viewed as fixed and summarises the contrary quite succinctly: "*Just because some people can do something with little or no training, it doesn't mean that others can't do it (and sometimes do it even better) with training*" (Dweck, 2006, p. 70) - a quote which may need to be displayed in my room from now on. More exploration of this concept could have been utilised within the interventions, possibly exploring examples of former pupils who had natural ability versus acquire ability, in order to assist with this line of thinking.

Dweck (2006) warns that able learners may need to shift their thinking of *effort* as it is often associated with something that lower ability learners require more than that of higher ability ones; they can simply use their intelligence/ability to succeed. We often consider finding things effortless to be a virtue, a badge of honour, whereas requiring effort is a sign of weakness. Pupils may not recognise that effort is actually something that *all* abilities can utilise in order to achieve continual progress. Therefore, it was very positive to witness that in their responses to this question (GM4) pupils showed huge moves towards believing that effort can be changed. Overall there was a 32.3% shift into the top two positive categories with a 25.8% shift into the most positive. To mitigate Dweck's theory I had emphasised and praised the pupils' efforts over success and continuously recognised that the pupils were putting increasing effort in as they took ownership for their chosen piece of work. The removal of specific level-based success criteria seemed to really focus the pupils as they set their own targets of what they wanted to achieve, and many produced more lyrics/music than I had set as a minimum. They certainly put in more effort to this piece of work than they had to the previous topics

in year 9. Again, the pupils' acceptance of effort being a malleable behaviour is backed up in recent Growth Mindset research (Mofield & Peters, 2018).

Pupils were more receptive to the possibility of changing the subjects that they like from their responses to GM2. Whilst all classes saw positive movement (although Set 3 saw a slight drop at the top end) Set 2 did also see some change towards the negative. Given that this was a hot topic with their subject choices it may not have been the best time to test out this area of thinking.

GM5 regarding changing their behaviour was more inconsistent with pupils moving away from a more neutral starting position to both positive and negative viewpoints post-intervention. Teacher observation of negative and positive behaviours saw a clear improvement, so it is curious as to why the pupils were not so aware of this. However, to avoid the Class Dojo points being the focus of the lessons they were not displayed on the board throughout this term. If they had been, pupils could quite literally have seen the improvement in their behaviour through the shift in green/red points. Future research could compare the use of hidden and displayed points with how pupils perceive their behaviour.

GM 6 refers to pupils giving up with a clear link to Grit (G). Their responses show a positive shift across all three classes. Throughout this project the pupils engaged well and committed right through to the end. In the final lesson they turned up asking if this was the submission day and were keen to get in and get started; the first time I've seen this from this cohort. They asked more questions that they would normally in order to achieve what *they* wanted to from their piece of work. If they were not asking me for help they were asking each other and the on-task behaviours were significantly improved.

There was a reasonable increase in Grit across many of the questions but with some disparity between classes (Appendix H). G1 saw a 9.7% increase in the positive responses, however, there is inconsistency between the three sets with Set 2 having both the biggest movement to positive **and** the only set to have a movement from neutral into negative. Although Set 1 had a smaller movement to positive it was the most positive class to start with. And similarly, Set 3 had the smallest positive change but started by far the more negative and made a shift from negative to neutral. Differences between the classes are seen throughout the data set and show interesting trends towards how a class has or has not shifted their responses.

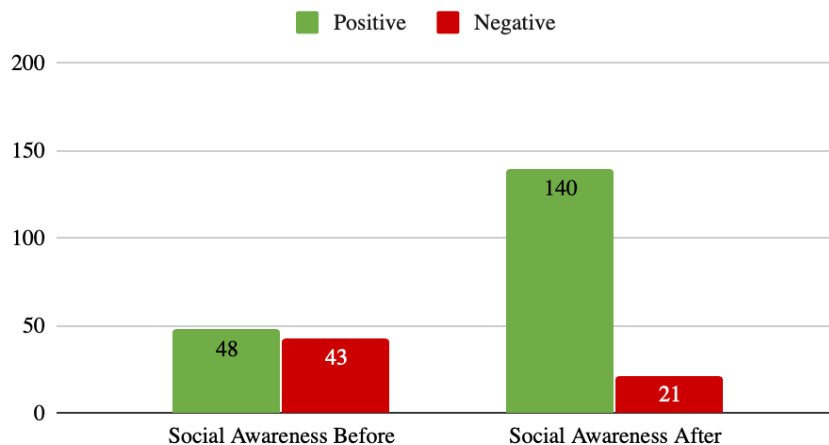
G2, their willingness to try again, returned a marginally positive overall result but was again inconsistent between the three classes. Both before and after the intervention the majority of pupils were quite positive about their ability to try again. G3, 4 and 5 were again all marginally positive overall but inconsistent between classes giving non-significant improvement after the interventions.

What G2, G3 and G4 do show are positive gains in Set 3 which started the most negative on each set of responses. This could demonstrate that the interventions worked in reducing negative attitudes (into neutral ones) even if it was not able to continue that journey into positive ones within the given timescale. This is interesting as although the pupils' intervention did not continue for months, it was a clear project that was introduced at the start of the eight weeks and the aims were returned to each lesson with interim goals and targets that the pupils worked on. This could have had a residual effect on their attitudes towards project work which is lacking as a teaching method in their key stage 3 curriculum.

In relation to the original aim, there is evidence here that pupils' growth mindset has increased both through the pupil reporting and teacher observation. The level of independence started to improve, and the pupils appeared to be aiming higher than they would have done previously. This has shown in the work that pupils have produced. The pupils have, with this increased in self-belief, achieved the best work of the year not only in the quality but in the exploration of ideas and ownership they have taken. This backs up existing research into SEL impacting on academic achievement (Collaborative for Academic, Social, and Emotional Learning, 2015) (Dowling, 2010) (Goleman, 1996) (Kidron, et al., 2016) (Zins & Elias, 2007) (Zins, et al., 2007). It is very pleasing to have been able to extract such a level of change to mindset within the timescale, however, evidence suggests that this would need to be continued in order to effect long-term, permanent change (Collaborative for Academic, Social, and Emotional Learning, 2015).

The second aim was to *'develop pupils' social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationships to be grown'*. This aim was most closely linked to Social Awareness (SA) as both an SEL competency and as a survey section. Pupils responses (Appendix I) moved by +0.42 from 3.29 before intervention to 3.71 after. Teacher observations for these behaviours saw the biggest increase of 34% of all Social Awareness interactions being positive.

## Class Dojo Points Awarded for Social Awareness



The intervention sessions explicitly aimed to develop skills within this area with focus on emotions, personal experiences, individual preferences and differences with peers. The focus on these skills appears to have paid off with large increases in positive responses across all but one of these self-reported areas as well as in teacher observations.

Within the pupil survey SA1 – listening to other’s views – saw positive responses increase across each set with around a 20% increase in the highest-level responses for each class. An important factor in this increase could have been the time dedicated to allowing pupils to develop this skill. Each lesson started with activities that involved pupils speaking and listening to each other and direction was given on how to do this appropriately; essentially, they had increased opportunity to practice this skill.

SA2 and 5 considered both their own and others’ feelings. Both saw increases with the biggest increase in SA5 regarding recognising their own feelings. Set 1 by far saw the biggest increase after starting with a very negative response to identifying their own feelings before the interventions. Further study could have explored why the class scored so low before the intervention despite being the highest ability group, but this was not covered by the scope of this research. This skill was developed from the very first session with pupils labelling different emotions both visually and within their own feelings. This labelling moved pupils from initial ‘happy’ and ‘sad’ emotions to a whole range of emotion-based vocabulary as well as exploring any differences of opinion. It would correlate that being able to recognise a wider range of emotions would assist them in identifying them both within themselves and respecting them within others; it is difficult to care about something that you do not understand.

In contrast, pupils did not feel that they complimented others, with very little movement in their responses. Reviewing the sessions, it is obvious that specific opportunities to do so were not given, as the focus was on process rather than on reflection of completed or partially completed work. This is actually a shift from the normal classroom procedure as they are taught from the start of year 7 to compliment and praise each other's musical performances and compositions as a matter of course. I would therefore suggest that lack of development in this area is down to the lesson content and delivery rather than a specific shift or lack of in pupil behaviour.

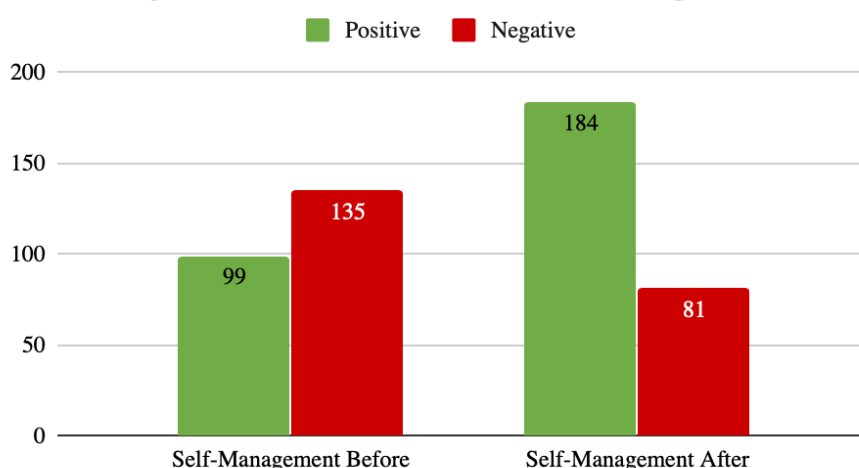
SA4, SA6, SA7 and SA8 relate to how pupils interact with each other. Pupils were encouraged to consider the points of view of others throughout the sessions. Music was an easy way in as they all have different tastes, experiences and memories. They were also explicitly encouraged to consider and be respectful of their individual differences outside of the Music classroom in their daily interactions with each other. There was a clear move from negative to positive in each of these skill areas showing pupils have developed their ability to work with others and negotiate difference of opinion in a respectful manner.

Social Awareness was clearly the most successfully developed skill area from the intervention. This was positive in allowing the pupils to work together more effectively which is an essential skill within the Music classroom. It also increased the positive interactions they had with me as their teacher with a reduction in negative confrontations regarding their attitude. The classroom climate improved over the course of the lessons which had a spiral effect in which pupils progressively improved with both their work and interactions with each other.

There was also a clear link to the third aim to *'develop pupils' emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work'*. Increased empathy and understanding of theirs and other's emotions has allowed them to appraise musical recordings more effectively and with a broader appreciation of purpose. Music is no longer 'happy' or 'sad' as they have a wider vocabulary of emotional adjectives and an understanding of how these can be applied to the music they listen to. Conversations were deeper and broader than previously experienced with this year group and it really was a pleasure to hear them talking so passionately at times. I believe it also greatly enhanced the general atmosphere in the classroom.

In fact, Social Awareness seemed to have a bigger impact on the third research aim than the preconceived link to Self-Management (SM). Pupil responses (Appendix J) to this section of the survey only returned a +0.05 increase. Teacher observations however revealed a different picture. By far the largest amount of points both positive and negative were awarded for Self-Management suggesting it is the area that attracts the most teacher attention during lessons; not surprising when it is linked to quite concrete behaviours such as being on/off task, disrespectful responses, shouting out and not following instructions. Within this category there was a 27% increase in positive observations after interventions. It was also the only category that had more negative than positive observations in the pre-intervention data collection; a trend that was reversed by the post-intervention collection.

### Class Dojo Points Awarded for Self-Management



It should be noted that the pupils rated themselves higher in this section than any of the others in the first survey. Essentially, the pupils thought that their Self-Management skills were their best asset out of the four areas surveyed. This in contrast to the initial teacher observation which rated this area as their weakest. One hypothesis could therefore be that rather than improving in the second survey the pupils could have just developed a more realistic impression of their own behaviour through the interventions; they may now understand that their Self-Management behaviours were not as good as first thought, thereby balancing out their responses in the second survey.

Understanding, and developing their Self-Management skills, especially those directly linked to their own emotional competencies, is vitally important within social and

emotional research. The impact of having low skills in this area may not only affect academic progress, through deficits in relating to the world around them, but in their own mental health (Goleman, 1996). Goleman believes that SEL strategies can be used to prevent degeneration into depression in many young people, in order to reverse the current dramatic rise in such diagnoses. Dweck (2006) has also found a correlation between mindset and depression, with a growth mindset increasing a person's ability to minimise the impact of depressive feelings and guide themselves through. Due to this I feel it will be an important area to continue researching and exploring with pupils to ensure not only their academic success but their long-term wellbeing.

### *Validity and Reliability*

As discussed in the methodology, there are a number of factors involved with the research which will affect its validity, especially in relation to its transferability to other contexts. The inclusion of me as the teacher and researcher will also include an element of bias. The huge increase in the number of Class Dojo points given after the intervention could be a demonstration of this as it could be considered that I was trying harder to award points in the later lessons. However, the distribution of the points before and after, despite being spread across a wider range of Class Dojo categories, correlate with the same social and emotional competency categories, despite me having not looked at any of the data until after the final surveys and points had been concluded. I was aware during the latter sessions that I appeared to be awarding more overall points but felt at the time that this was because I had more opportunity to do so due to the improved classroom climate; I was spending less time dealing with behavioural incidents so literally observed more of the lesson from a central position. Whilst the use of teacher as observer is not ideal from many research perspectives, I still believe it was the best way of retaining the relationship required to develop an effective SEL programme. The inclusion of an external observer would likely have had *some* impact on how pupils behaved in the classroom creating its own issue with validity. Filming the lessons could have allowed for a wider view of the class due to the ability to re-watch and reflect on behaviours. However, available technology and pupil negativity towards being filmed made this impossible in the current research.

The use of the Panorama survey (Panorama Education, n.d.(b)) as a method of 'quality assurance' given its wide usage in US schools is now one which I would revisit. A number of the questions conflicted with the style of learning used within my music lessons (such as bringing equipment). Most inferred pupils should be considering their wider behaviours not just those displayed within the music room and I did not want to

interfere with pupils completing the surveys meaning some may have answered specifically regarding my lessons whilst others may have been thinking more broadly. Using the survey as a starting point but reworking it within the context of my school and classroom should be considered if I was to repeat this process in future.

The decision not to include participant interviews means that there is a lack of depth to the data collected. Whilst I can see that the overall picture from the data is of some positivity, it does not allow me to ask some more probing questions, especially with regards to the Self-Management section where pupils opinions stayed fairly static. Pupils interviews or focus groups both before and after could have provided added additional context to the pupil data. One of the reasons I did not consider this appropriate at the start of the research was due to the poor relationship I had with this particular cohort which triggered the research question to start with. Future research with either this or subsequent cohort could include this extra element.

### *Summary*

All three aims have seen overall positive results from the intervention sessions. Pupils responded well with the lessons and the progress they made with their work was very good. The process that pupils applied to their learning in the latter weeks was also strong and holds hope for future development over time. It should be remembered that this was a small, self-contained programme of intervention, specifically tailored to the context of this cohort and this classroom. Whilst there is clearly lessons to be learned and taken further it should not be assumed that duplication of success would happen from this particular set of resources.

## Chapter Five: Conclusions and Recommendations

- **Aim 1:** develop pupils' growth mind-set in order to work more independently and to push themselves to a higher level of success

The interventions undertaken during this research show that pupils' growth mind-set has increased positively. Pupils have identified that within themselves across most areas of the given survey and this has correlated with teacher observations. The outcome is that they were more independent in their learning and took more risks when pursuing their learning outcomes. Their song compositions were to a higher standard than previously witnessed; the maturity and empathy demonstrated in their song lyrics was impressive. The link between growth mind-set and increased emotional intelligence really showed through in their class work, strengthening existing research (Goleman, 1996) (Dweck, 2006) (Zins, et al., 2007) (Zins & Elias, 2007).

- **Aim 2:** develop pupils' social skills to interact with both the teacher and each other in a more desirable manner in order to enhance the classroom climate and allow for more supportive relationships to be grown

Whilst I definitively considered there to be progress with regards to the classroom climate and the way I was spoken to as a teacher, there was differences of opinion in how pupils felt they reacted to each other. This was identified through their Self-Management responses rather than their Social Awareness skills. The increase in social skills clearly supported a better atmosphere for learning and class discussion with a higher level of respect growing as the weeks passed. It is possible that changing the way they view themselves and their own behaviour will just take longer or that it will require a more intensive and streamlined programme aimed at these specific competencies as outlined with CASEL's research on programme types (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2017) (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2003) (Collaborative for Academic, Social, and Emotional Learning, 2015).

- **Aim 3** - develop pupils' emotional intelligence in order to enhance their musical appraising skills as well as their empathy for others, in order to critically reflect on their own and others work

I felt that pupils' emotional language developed quickly throughout the first few sessions and this supported their vocabulary in appraising both their own and existing music. It appeared from their responses in the survey that they did not consider their Self-Management competencies to have improved, although they scored them fairly highly in the first instance. From an educational perspective the strategies used to develop their emotional language showed significant development and will be worked into future lesson planning for all year groups. Transferring this from a musical context to a 'real life' application may require more research and thought.

Other aspects of the research have produced areas to pursue further or embed more widely. This research was delivered with a specific year 9 cohort with substantial deficiencies in social and emotional competencies. However, pupils in all cohorts could benefit from supported teaching of SEL strategies (Goleman, 1996) (Zins & Elias, 2007) (Zins, et al., 2007). As well as looking at widening emotional language through musical appraising throughout key stage 3, opportunities to reflect on personal differences could easily be embedded throughout general practice. Taking time to talk about whether pupils 'like' the music I play for them or not, and more importantly discussing why, can lead on conversations about tolerance and acceptance of personal tastes.

What we do not know from this research is whether the positive changes will be retained by learners after the interventions end. Whilst I hope to continue to include SEL strategies within my teaching both explicitly and implicitly, this particular cohort moved on within a few months of completing the interventions; only 10 pupils opted to continue the subject into GCSE. Research suggests that SEL approaches need to be ongoing in order to yield the most long-lasting results (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2003) (Zins & Elias, 2007) (Zins, et al., 2007) whilst CASEL's 2015 SElect review only consider programmes that continue over multiple years. Repeating the survey with our pupils six months later would either confirm or dispute this literature but the purpose of doing so would be limited. A more productive action would now be to implement similar strategies into music lessons from early in year 7 and build on these throughout the key stage in order to embed the skills before they move on to GCSE. This is of course presuming that SEL would not in future be utilised across the school.

Repeating the whole process in future years is unlikely, however sections of the Panorama survey could be utilised in a revised way to continue to explore areas where progress was particularly successful, or specifically limited. I would like to explore the Self-Management competencies further both in terms of existing research and intervention strategies. Continue to build growth mind-set in all pupils is both possible and productive across music and my neighbouring subject of drama; a combined project focusing closely on how pupils perceive themselves could be an interesting next step.

Extending SEL strategies across the school would be less straight forward. This particular research worked well due to it being one teacher who, given that I am researching this area, has a clear interest and commitment to the concept. Whilst there was an overall plan for the sessions the actual content varied after session two for each of the three classes as pupils fed their ideas, song choices and tastes in, so duplication as a formal 'scheme of work' would deviate from a traditional one with fixed resources. Therefore, even across a single music department it could be difficult to replicate, less so across different schools or across subject areas. Delivery by other music teachers would require time to share current research, joint planning and general training. It would certainly be possible but the teachers would really need to 'buy in' to it due to the teacher's relationships and delivery being such a crucial aspect (Edgar, 2013) otherwise staff apathy would become a barrier to success as witnessed in previous research including the UK's former SEAL programme (Humphrey, et al., 2010) and highlighted as an area of importance by CASEL (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2017).

With regards to my own wider school there has been a lot of interest in the research and wider SEL strategies. Presenting the project to staff and highlighting the areas of success that occurred will be important as well as linking staff to relevant areas of existing research. The evidence that these strategies *can* work to make at least *some* difference when delivered by one teacher in one subject is important enough to demonstrate value in others exploring their own versions of using SEL strategies. Whilst the ideal position is that a whole school approach is taken, the journey towards this may start with a number of departments trialling their own projects. CASEL (2017) points out that not all programmes need to be financially costly (this project was essentially free), time to research and plan is essential and with so many competing priorities this could be

perceived as 'yet another initiative' if it were to be enforced from a whole school perspective.

CASEL (2017) also promotes work with the families and the wider community for the best results. As a school we have a number of strategies already ongoing within these areas. What is needed may not be a new 'programme' but somebody to map out all of the provision and make relevant connections. What are we already doing and how could we tweak this, or simply communicate this better with ourselves and others?

Some of the programmes detailed by CASEL (2015) are standalone sessions. It is unlikely in the crowded curriculum that time could be given over to regular timetabled sessions but utilising registration time or breakdown pastoral days for this could be something to be considered as whole school approach; being creative with what we already have.

Whilst any whole school changes are beyond the remit of me a classroom teacher, they are possible areas of consideration as the school prepares to undertake our biggest ever reform for many generations; the new Curriculum for Wales. This could be the perfect time for assessing opportunities to embed, to explore, to take risks and to make changes. As a school we are already focusing on creative learning habits which link closely to Habits of Mind (Costa & Kallick, 2009) and Growth Mind-set (Dweck, 2006) with little obvious resistance from staff. With my extended understanding of social and emotional learning I plan to research how our school's learning habits link with existing work and how they can be specifically enhanced within the music classroom. Future research could then include working with music departments across the county to further develop ways in which to utilise SEL within the music classroom.

In a time where music education is seen by many as a luxury, and yet again divides are opening up between rich and poor it is exciting to see the potential of this subject for wider means. I am fortunate to work in both a school and a nation where music is still regarded as an essential component of our culture and heritage, where its benefits to pupil development are recognised and supported. It is satisfying to be able to repay this support by demonstrating how the explicit power of music education's link social and emotional skills has the potential to enhance pupils' lifelong skills.

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## Appendix A – Photographs from Social and Emotional Aspects of Learning (SEAL) Resources

Part of the UK Governments SEAL Resources for Secondary Schools.

This programme includes multiple resources all of which were archived on 9<sup>th</sup> August 2011 and were accessed & downloaded on 27<sup>th</sup> February 2019 through the National Archives:

<https://webarchive.nationalarchives.gov.uk/20110809155339/http://nsonline.org.uk/inclusion/behaviourattendanceandseal/seal>

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The Primary SEAL resource has a wide variety of photocards that might be used.

How to use the SEAL photocards

These photocards can be used flexibly across the curriculum and within the Year 7 curriculum resource. Most of them were created by a group of pupils in Years 7 and 8, who worked with a photographer for a day. They are provided as examples of how a school might develop their own resources and might also be used as a starting point for schools as they create a wider range of photocards.

Reading facial expressions and understanding emotionally charged situations is about interpretation. For this reason the cards are numbered rather than labelled. This allows the pupils to discuss their own interpretations of the feelings shown, the context in which this is occurring and come up with their own meanings. The index give an indication of the content of the cards to allow for planning.

The following questions are designed to help facilitate discussions:

- What do you think this photograph is showing?
- What do you think is happening?
- Why do you think this?
- How do you think this person is feeling?

(Encourage the pupils to use as wide a vocabulary as possible. Add any words that you think might help.)

- Have you ever felt like that?
- When have you felt like that?

(This is an opportunity to reinforce the idea that not everyone will have the same feelings in the same situations.)

- If you feel like that, how would it be expressed?

What would you:

- face look like?
- body look like?

- If you felt like this how would your body feel inside?
- If you felt like this, what might you do?
- Can you think of any more words that might describe the feelings shown?
- What do you think a person who felt like this would do?
- If this is an uncomfortable feeling how might you turn this uncomfortable feeling into a more comfortable one?

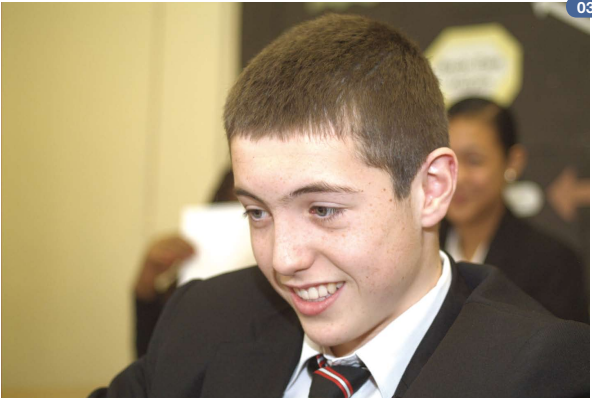
Can you agree a definition of the feeling(s) you have described?



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02



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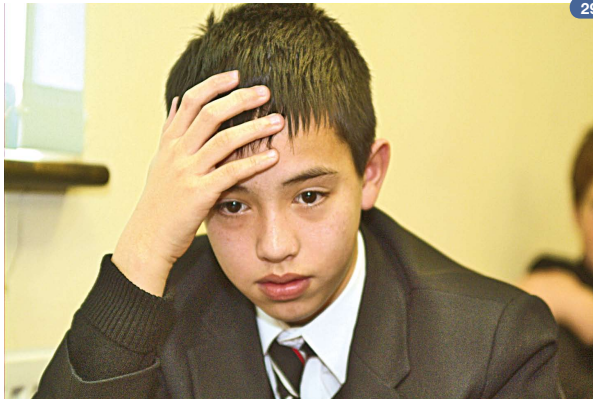
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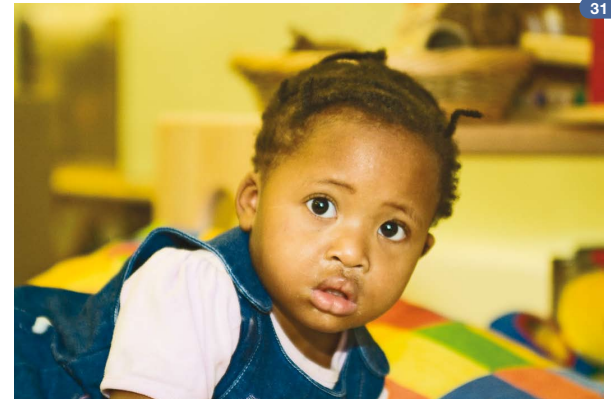
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## Appendix B – Participant Letter and Consent

1. Pupil letter and consent form
2. Parent letter and consent form

March 2019

Dear Participant:

My name is C Kostromin and I am studying in the School of Education.

I would like to invite you to participate in my research project. This project will look at social and emotional skills and how they affect learning in the classroom. Over the next term I will be embedding strategies into our music lessons that are designed to improve your social and emotional skills whilst still following our normal music curriculum. I am inviting you to take part in this research by completing a questionnaire before and after these lessons. I will also be using the points collected using Class Dojo for positive and negative behaviour as part of the research.

All questionnaires will be kept strictly confidential to myself and at **NO** time will individual questionnaires be released to the general public. This gives you a chance to express your views in a confidential forum and still be able to make a difference.

If you do not wish to complete the questionnaire then you do not have to and you may continue with the other activities provided in the classroom.

Your participation in this study is completely voluntary so you can withdraw from the questionnaire at any stage. If you complete the questionnaire and then change your mind and want to remove your answers you can do so by letting me know, either face-to-face or by email. Alternatively you can let your Learning Leader know and they can pass this on to me.

Your name will not appear on your responses, but your email address is collected – this is so that we can remove your answers if you change your mind. I will not look at who has answered the questionnaire and will swap your email address for a unique number. The only time I would look at your email address is to remove your answer. This means that your answers are confidential but not anonymous (I am still able to identify you if I need to). If you don't understand what this means, please ask me or your Learning Leader.

If you are happy to take part in the questionnaire and your parents have also provided consent, please sign the attached slip and access the questionnaire via Google Classroom.

Our questionnaire should take about 15 minutes to complete, but there is no time constraint. There are also no right or wrong answers. All instructions are included on the questionnaire.

After the data has been analysed I will be showing you and the classes involved the results and you will have chance to discuss these if you wish.

I thank you in advance for your time and participation. If any questions do arise, feel free to contact me at your convenience.

Mrs Kostromin,  
Head of Music

**Pupil Consent Slip** – Researching the impact of Social and Emotional Skills on pupil learning.

I understand the purpose of the of research.

I understand participating is voluntary and I do not have to take part in the study.

I understand that I can withdraw at any time and I know how to do this.

I am happy to take part in the study and want to complete the questionnaire.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_

March 2019

Dear Parent/Guardian:

My name is C Kostromin and I am studying in the School of Education.

I would like to invite your child to participate in my research project. This project will look at social and emotional skills and how they affect learning in the classroom. Over the next term I will be embedding strategies into our music lessons that are designed to improve your social and emotional skills whilst still following our normal music curriculum. I am inviting them to take part in this research by completing a questionnaire before and after these lessons. I will also be using the points collected using Class Dojo for positive and negative behaviour as part of the research.

All questionnaires will be kept strictly confidential to myself and at **NO** time will individual questionnaires be released to the general public. If your child does not wish to complete the questionnaire for the research project then they do not have to and they may continue with the other activities provided in the classroom.

Their participation in this study is completely voluntary so they can withdraw from the questionnaire at any stage. If they complete the questionnaire and then either they or you change your mind and want to remove their answers you can do so by letting me know, either face-to-face, email or phoning the school using the normal contact details. Alternatively, you can let their Learning Leader know and they can pass this on to me.

Their name will not appear on your responses, but their school email address is collected – this is so that we can remove their answers if you or they change your mind about participating. I will not look at who has answered the questionnaire and this information will be hidden. The only time I would look at the email address is to remove the answers on request. This means that their answers are confidential but not anonymous (I am able to identify them if I need to). If you have any concerns about this please do not hesitate to get in contact with me via the normal school channels.

If you are happy for your child to participate in this research please sign the attached consent form. I thank you in advance for your time and participation. If any questions do arise, feel free to contact me at your convenience.

*Mrs Kostromin*

Head of Music

**March 2019**

**Parent Consent Slip** – Researching the impact of Social and Emotional Skills on pupil learning.

A research project being undertaken by Mrs Kostromin, Head of Music.

I understand the purpose of the of research.

I understand participating is voluntary and I do not have allow my child to take part in the study.

I understand that I can withdraw consent at any time and I know how to do this.

I am happy for my child to take part in the study and complete the questionnaires.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## Appendix C – Ethics Form

Ethics form with School name redacted.

## APPLICATION FOR ETHICAL APPROVAL

**In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.**

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

**Please read the notes for guidance before completing ALL sections of the form.**

**This form must be completed and approved prior to undertaking any research activity.** Please see Checklist for details of process for different categories of application.

### SECTION A: About You (Principal Researcher)

|                                 |                                                             |                     |                                     |
|---------------------------------|-------------------------------------------------------------|---------------------|-------------------------------------|
| Full Name:                      | Cara Jayne Kostromin                                        |                     |                                     |
| Tick all boxes which apply:     |                                                             |                     |                                     |
| Member of staff:                | <input type="checkbox"/>                                    | Student:            | <input checked="" type="checkbox"/> |
| Honorary research fellow:       | <input type="checkbox"/>                                    |                     |                                     |
| Faculty/School/Centre:          | Centre for Continuing Professional Learning and Development |                     |                                     |
| Campus:                         | Swansea                                                     |                     |                                     |
| E-mail address:                 | Ckostromin.144161@student.uwtsd.ac.uk                       |                     |                                     |
| Contact Telephone Number:       | 07791934507                                                 |                     |                                     |
| <b>For students:</b>            |                                                             |                     |                                     |
| Student Number:                 | P144161 / 1450944                                           | Undergraduate       | <input type="checkbox"/>            |
| Programme of Study:             | MA Education                                                | Taught Postgraduate | <input checked="" type="checkbox"/> |
| Director of Studies/Supervisor: | Sarah Stewart/Jayne Morgan                                  | Research            | <input type="checkbox"/>            |

### SECTION B: Approval for Research Activity

|                                                                                                                                                                                                              |                                   |                                     |          |                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|----------|--------------------------|
| Has the research activity received approval in principle?<br>(please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual) | YES                               | <input checked="" type="checkbox"/> | NO       | <input type="checkbox"/> |
|                                                                                                                                                                                                              |                                   |                                     |          | <b>Date</b>              |
| If Yes, please indicate source of approval (and date where known):                                                                                                                                           | Research Degrees Committee        | <input type="checkbox"/>            |          |                          |
|                                                                                                                                                                                                              | Faculty Research Committee        | <input type="checkbox"/>            |          |                          |
|                                                                                                                                                                                                              | Other (write in)<br>Sarah Stewart | <input checked="" type="checkbox"/> | 11/12/18 |                          |

Approval in principle **must** be obtained from the relevant source prior to seeking ethical approval.

### SECTION C: External Ethical Guidance Materials

|                                                                                                                                                                                                                                                                                                                                                    |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. |                                     |
| <b>BERA</b>                                                                                                                                                                                                                                                                                                                                        | <input checked="" type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>            |
|                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>            |

### SECTION D: External Collaborative Research Activity

|                                                                                                                        |     |                                     |    |                          |
|------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------|----|--------------------------|
| Does the research activity involve collaborators outside of the University?                                            | YES | <input checked="" type="checkbox"/> | NO | <input type="checkbox"/> |
| If Yes, please provide the name of the external organisation and name and contact details for the main contact person: |     |                                     |    |                          |
| Institution                                                                                                            |     |                                     |    |                          |
| Contact person name                                                                                                    |     |                                     |    |                          |
| Contact person e-mail address                                                                                          |     |                                     |    |                          |

#### Where research activity is carried out in collaboration with an external organisation

|                                                                                                |     |                          |    |                                     |
|------------------------------------------------------------------------------------------------|-----|--------------------------|----|-------------------------------------|
| Does this organisation have its own ethics approval system?                                    | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| If Yes, please attach a copy of any final approval (or interim approval) from the organisation |     |                          |    |                                     |

### SECTION E: Details of Research Activity

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                              |                    |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------|-----------|
| Indicative title:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Classroom management: developing a behaviour for learning system that works. |                    |           |
| Proposed start date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | February 11 <sup>th</sup> 2019                                               | Proposed end date: | July 2019 |
| <b>Purpose of research activity (including aims and objectives)</b><br>Outline the purpose, aims and objectives of the research activity, including key research questions. Show briefly how existing research has informed the proposed activity and explain what the research activity will add and how it addresses an area of importance. (Maximum 300 words)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                              |                    |           |
| Classroom behaviour is an on-going issue for teachers across all sectors. It is widely recognised that positive behaviours are required to ensure that effective learning takes place. However, it is not agreed as to what causes these negative behaviours nor the best ways to address them.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                              |                    |           |
| There is a growing body of evidence linking social and emotional intelligence to children's behaviour. CASEL (2011) produced a meta-analysis of research on Social and Emotional Learning (SEL) which demonstrated that pupils undertaking these programs had improved academic performance, conduct and lower emotional distress amongst other benefits. Included in this research is evidence suggesting that pupils from lower socio-economic backgrounds tend to have lower social and emotional intelligence and that this may link to the increased rates of poor behaviour from these learners. Different programs include approaches for both whole school delivery as stand along lessons, and resources to embed SEL into individual subject-based lessons. This research will be focusing on the latter and how SEL can be delivered through music lessons. |                                                                              |                    |           |
| The school used in this study has a large proportion of learners from lower socio-economic backgrounds and currently struggles with substantial levels of poor behaviour disrupting the learning across the school, but especially in the current year 9 cohort. This is causing significant issue in music lessons due to the practical nature of the subject and the requirement for pupils to demonstrate personal skills such as independence, persistence, resilience and self-control. The purpose of this research is to identify elements of the social and                                                                                                                                                                                                                                                                                                    |                                                                              |                    |           |

emotional intelligence of learners from the 'top three sets' in year 9 before undertaking eight intervention activities in social and emotional learning.

Will such subject based intervention in short bursts be enough to have an impact on their social and emotional intelligence and, in turn, improve the classroom climate for learning in music lessons?

### Proposed methods

Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. (Maximum 600 words)

A mixture of qualitative and quantitative will be gathered following BERA guidelines regarding 'Responsibilities to Participants' ensuring informed consent, transparency of the research purpose and ensuring the right to withdraw is respected. No incentives will be made to participate and there will be no consequence for pupils who do not wish to. Year 9 pupils from the upper three sets will be asked to complete questionnaires to identify their current social and emotional intelligence skills using a selection of questions from "Panorama Social-Emotional Learning Survey". Then, over a period of 8 lessons pupils will undertake learning activities focusing on increasing their social and emotional focus. This will be embedded in their regular work on 'Popular Music' to ensure that they are not missing out on curriculum content. It will include the study of song lyrics, their meaning and context, moving towards pupils creating their own work. (The upper ability classes have been chosen as the lower sets are following a different curriculum and are less likely to understand the purpose of the research at this time; therefore it would be inappropriate to ask them to provide informed consent. They will be exploring work on social and emotional learning in a way that is suited to their abilities which is not forming part of this research) At the end of the intervention the pupils will complete further questionnaires to identify which areas, if any, they have improved in. There will also be monitoring (teacher observation) of behaviour over this time, via the departments 'behaviour points system' to identify whether there has been any changes to positive or negative learning behaviours. This system, Class Dojo, allocates points for positive behaviours and deducts them for negative behaviours. It can record points given to individuals, groups and whole classes and is already widely used within the school in line with usual school policy. Points are given to pupils who actively engage with the lesson by answering questions, demonstrating work and being on task. During periods of pupil led activity, points are widely given to pupils who are 'on task' and completing/rehearsing the work set, with pupils who are not 'on task' (talking, day dreaming, time wasting) not given points rather than having points removed in the first instance. Behaviour points would be removed if pupils are demonstrating unwanted behaviours as defined by our school policy, after positive behaviour management tools have failed to bring them on task or in line. This could be continued talking in the lesson, refusal to complete work, being out of seat without permission and so forth. More significant behaviour incidents such as bullying or fighting would not be dealt with through this system as they are rare and unlikely to be due to the learning process. Whilst this collection of points is based on the subjective observations of the teacher it is a method that is consistently used within the school. Its place within this research is to give an idea of whether the classroom climate and pupil engagement appears to be changing or not during and after interventions. It will be evaluated alongside the learner questionnaires which will also ask the learners if they feel there has been any changes in class behaviour. References to classroom behaviours in the dissertation write-up will be in general, grouped terms (e.g. XXXX types of behaviours increased/decreased) rather than referencing any particular isolated occurrences ensuring that individual pupils would not be identifiable.

All questionnaires will be completed using Google Forms with results being encrypted upon completion. The questionnaires will not collect names but will record the email addresses of respondents in order to allow pupils to withdraw from the research. Pupil email addresses do not contain their full names, but pupils can be identified from them if necessary; therefore, participants will not have anonymity from the researcher. Pupils will be informed that their responses can be identified but this will only be done if they wish to remove their responses; otherwise, all of their responses will be held confidentially. Year 9 pupils will complete their surveys during a timetabled lesson as part of a normal 'pupil voice' exercise; as surveys are timestamped there is the ability to remove a whole class' data if circumstances required.

As the intervention activities are being embedded in the regular programme of study, all year 9 learners will be receiving these sessions. However, only pupils who have given informed consent, along with their parent/guardians informed consent, will have their data used within the research.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location of research activity</b><br>Identify all locations where research activity will take place.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Cynffig Comprehensive School, Bridgend.<br><small>(this box should expand as you type)</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Research activity outside of the UK</b><br>If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural sensitivities or vulnerabilities of participants. |
| <small>(this box should expand as you type)</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### SECTION F: Scope of Research Activity

| Will the research activity include:                                                                                                             | YES                                 | NO                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Use of a questionnaire or similar research instrument?                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Use of interviews?                                                                                                                              | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Use of diaries?                                                                                                                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Participant observation with their knowledge?                                                                                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Participant observation without their knowledge?                                                                                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Use of video or audio recording?                                                                                                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Access to personal or confidential information without the participants' specific consent?                                                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Performance of any acts which may cause embarrassment or affect self-esteem?                                                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Investigation of participants involved in illegal activities?                                                                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Use of procedures that involve deception?                                                                                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Administration of any substance, agent or placebo?                                                                                              | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Working with live vertebrate animals?                                                                                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Other primary data collection methods, please explain in this box                                                                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

**SECTION G: Intended Participants**

| <b>Who are the intended participants:</b>                                                                          | <b>YES</b>                          | <b>NO</b>                           |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Students or staff at the University?                                                                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Adults (over the age of 18 and competent to give consent)?                                                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Vulnerable adults?                                                                                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Children under 18?                                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Prisoners?                                                                                                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Young offenders?                                                                                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| People engaged in illegal activities?                                                                              | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Others (please identify):                                                                                          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Participant numbers and source**

Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?

**Year 9 pupils = Approx 120 pupils**

| Information for participants:                                                                                                                       | YES                                 | NO                       | N/A                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?                          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you tell participants that their participation is voluntary?                                                                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you obtain written consent for participation?                                                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If the research is observational, will you ask participants for their consent to being observed?                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you tell participants that they may withdraw from the research at any time and for any reason?                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| With questionnaires, will you give participants the option of omitting questions they do not want to answer?                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If NO to any of above questions, please give an explanation                                                                                         |                                     |                          |                          |
| (this box should expand as you type)                                                                                                                |                                     |                          |                          |

| <b>Information for participants:</b>                                                                                                               | <b>YES</b>               | <b>NO</b>                           | <b>N/A</b>               |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|--------------------------|
| Will participants be paid?                                                                                                                         | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is specialist electrical or other equipment to be used with participants?                                                                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Are there any financial or other interests to the investigator or University arising from this study?                                              | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If YES to any question, please provide full details                                                                                                |                          |                                     |                          |
| <p>(this box should expand as you type)</p>                                                                                                        |                          |                                     |                          |

## SECTION H: Anticipated Risks

**Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.**

If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.

**Full risk assessment completed and appended?**

Yes ☐  
No ☒

### **Risks to participants**

For example: emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information

BERA Guidelines 2018 have been consulted prior to planning the research and will be consulted regularly throughout the research period to ensure compliance. I have also consulted the University's "Research Ethics & Integrity Code of Practice 2017-2020" outlining both the ethical responsibilities of the researcher and the University's ethics process which this form is a part of. As the research involves children I have also ensured that it complies with the seven commitments outlined the ERIC charter. I have ensured that the research's purpose is for the benefit of the pupils and that their best interests are at the heart of it. I have aimed to minimise the risks to participants in all areas.

The school and department in question already regularly collect data on positive and negative behaviour as part of their normal day-to-day activities using 'Class Dojo'. The research wants to look at whether the behaviour of the whole cohort and individual classes changes due to interventions which are not a usual part of the classroom practice. There is a limited risk that during this process pupils recorded behaviours could be identified. To remove this risk, cohort and whole class collation will be done at point of origin so the original, individual pupil data, will never be part of the research or leave the school system.

The pupils involved in the research will be under the age of 18 (13-14 year olds) therefore parental/guardian consent will be required as discussed in Section I below. All the potential pupils involved have the maturity and capacity to understand the purpose of the research and will therefore be able to give their own consent too via written means after a verbal explanation of the research. There is a risk that both pupils and/or parents may feel obligated to participate in the research due to it being carried out by their classroom teacher due to the power dynamics between pupil and teacher. It will be made clear throughout that non-participation or withdrawal of consent will in no way impact negatively on their future learning or inclusion in school activities. Participation in the research is separate from their participation from normal pupil voice activities and it is not a necessary requirement for any or all pupils to take part. They will be assured that their non-participation or withdrawal will not have a negative impact on the research and that they would in no way feel accountable for the success or failure of the research project. Pupils will also be able to inform their Learning Leader (Head of Year) if they wish to withdraw but do not feel comfortable approaching myself.

Personal data will be stored using Google Drive to avoid the use of portable devices such as hard drives and USB storage. This cloud storage is encrypted\*\* and allows files to be worked on within the school, university and researcher's home without physical transfer. The only physical device that data will be stored on will be the researcher's laptop which is a Macbook Pro; the cloud storage will allow files to be worked on in school without being stored on the school network or physical computer. All computer accounts and devices are password protected with encryption. All data will be deleted on completion of the research; after the submission and passing of the dissertation on confirmation of my supervising tutor. Participants will be informed as to the nature of the use of their data, and that data used (with the exception of the school's normal data collection) will be deleted on completion of the research and no later than September 2019. All usages of data will comply with GDPR.

Although it is anticipated that a focus on positive behaviours will have at least a neutral if not positive impact, there is a risk that behaviours could get worse during the intervention. If this were perceived to happen the intervention would stop immediately. This would be identified by teacher observations.

When working with written questionnaires there is a risk that participants may not have the required literacy skills to answer questions reliably. This is one of the reasons that the research will be undertaken with the higher three sets of pupils who have functional reading ages and comprehension abilities. The reading age of the questionnaire has been checked to be appropriate to these learners using school based tools. I have therefore

assessed that the risk that some pupils may provide unreliable responses to some questions is lower than if they were to undertake verbal interviews where clarity can be delivered by the interviewer but pupils may be more inclined to tailor their responses to what they think the interviewer wants to hear.

The questionnaires will be conducted by myself in a classroom environment. If pupils require support in completing any questions an explanation of a word will be given but examples will be avoided in order not to sway a particular response. If pupils wish to have support in completing the questionnaire from another member of staff this will be arranged at a time agreed by both the pupil and a member of the learning support staff who are experienced in supporting pupils in completing examinations without swaying learner responses. Having an LSA in the room for the initial delivery of the questionnaires will not be possible due to the constraints of the school system.

\*\* "Data is encrypted at several levels. Google forces HTTPS (Hypertext Transfer Protocol Secure) for all transmissions between users and G Suite services and uses Perfect Forward Secrecy (PFS) for all its services. Google also encrypts message transmissions with other mail servers using 256-bit Transport Layer Security (TLS) and utilizes 2048 RSA encryption keys for the validation and key exchange phases. This protects message communications when client users send and receive emails with external parties also using TLS.

PFS requires that the private keys for a connection are not kept in persistent storage. Anyone who breaks a single key can no longer decrypt months' worth of connections; in fact, not even the server operator is able to retroactively decrypt HTTPS sessions." <https://support.google.com/googlecloud/answer/6056693?hl=en> accessed 9<sup>th</sup> December 2018

If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities

As pupils are being asked to consider their social and emotional skills there may be pupils who become upset during the reflection process as they may identify negative characteristics in themselves. Should this occur I would refer to the schools' wellbeing procedures via the pastoral offices and follow up with the pupil and parents/guardians as to their continuation in the research for wellbeing purposes.

Should any safeguarding incidents or disclosure occur the researcher would follow the guidelines and procedures of both the school, local authority and university as appropriate.

### **Risks to investigator**

For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest

There is a risk to the research of professional harm should the research be conducted in an unprofessional manner, produce negative results or be perceived as harmful by outside sources.

To reduce this, the researcher will be transparent with all participants, parents/guardians and institutions at all times. The researcher will ensure that they conduct the research ethically, honestly and without bias to the best possible standards. As the outcomes of the research will impact on classroom practice there is a risk to professional reputation should the results be, or be perceived to be, negative. As discussed above, it is anticipated that the effect of the research would be at least neutral this risk should be minimal. However, the researcher will work closely with their line manager throughout as an outside observer as to the impact of the project. This will provide the researcher with additional confidence that no harm is occurring to participants or the researcher themselves.

There is a risk to the data if pupils are absent during the eight sessions or the pre/post questionnaires. If pupils are absent for the pre/post questionnaires but wish to be part of the research then they will be invited to complete these questionnaires at a mutually agreed time before the first intervention and within a week of the initial delivery of the post intervention questionnaires. If a pupil misses up to two intervention sessions then they will be invited to continue in the research if they still consent to. If a pupil misses more than two intervention sessions then a conversation will take place with them and their parent/guardian if appropriate to discuss that they will not have had as full an experience as the other learners so, although they will continue to participate in the lessons along with all other learners, their questionnaire responses will not be included in the final research at this time.

There is a risk that not enough pupils consent to participate (or too many pupils choose to withdraw) to make the research viable; I would not wish to continue without a minimum of 20 participants from across the three classes in question. This would result in the research not being undertaken at this time. Whilst this is unfortunate, it is the right of each pupil and parent/guardian and one which I accept before undertaking this dissertation.

### **University/institutional risks**

For example: adverse publicity, financial loss, data protection

There is a risk to the University should the research be conducted unethically. To avoid this risk the researcher will comply with all necessary ethical requirements of the University and BERA Guidelines 2018, along with GDPR and The Data Protection Act 2018 requirements. The researcher will discuss any changes to the project with the University if they occur. Close supervision should also mitigate risks.

### **Adverse outcomes**

List measures put in place to limit any adverse effects or outcomes of research activity where appropriate. Include any emergency protocols.

(this box should expand as you type)

### **Disclosure and Barring Service**

If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.

Has a DBS certificate been obtained?

**YES**

**NO**

**N/A**

☒

☐

☐

## SECTION I: Feedback, Consent and Confidentiality

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Feedback</b></p> <p>What feedback will be provided to participants, how will this be done and when?</p> <p>All participants will have access to a summary of findings. This will be offered to pupils on completion of the research through lessons.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p><b>Informed consent</b></p> <p>Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded.</p> <p>Before starting the research, all potential participants will be asked to give consent. The nature of the research will be explained using suitable language to pupils and parents. For pupils this will be done verbally in class along with a letter for them to sign to say they agree to consent. For parents/guardians this will be in the form of a written letter using non-technical language and the provision of a contact number if they wish to discuss it further verbally.</p> <p>Pupils will have the research explained verbally before starting and the first section of their questionnaire will again ask them if they consent for their responses to be used in this research and how to withdraw either by speaking to me in person, by email or in writing.</p> <p>Parents of pupil participants will be informed of the research via letter along with a written consent form for them to sign if they agree to their child participating in the research. They may request further information by email or phone or in writing via the school. The letter will also explain how to withdraw consent during and after the research period using any of the means above.</p> <p>Consent forms will be stored until completion of the research when they will be destroyed to comply with the Data Protection Act 2018 &amp; GDPR. The purpose of what data is being collected and stored for, and how long will be explained in line with GDPR.</p> |
| <p><b>Confidentiality / Anonymity</b></p> <p>Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.</p> <p>No names will be included in the final report and it will therefore be confidential. However, to ensure that pupil responses can be withdrawn at any stage their school email address will be collected before being 'hidden' during the data handling processes. They will be hidden by assigning responses a unique number that is separately stored against the email address on a separate document which will be held securely using encrypted means; the email addresses will then be removed from the data sheet. If a pupil wishes to withdraw their email address can be cross reference with the unique identifier in order to locate their individual responses and remove them from the data set.</p> <p>It will not be possible to ensure pupils anonymity to the researcher as I would therefore technically I have the ability to identify pupils. This process will be explained to pupils during the consent process before they complete either of the questionnaires.</p> <p>Pupils and parent/guardians will be informed as to why the email addresses are being collected and that the actual research will be fully confidential.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## SECTION J: Data Protection and Storage

In completing this section refer to the University's Research Data Management Policy and the extensive resources on the University's Research Data Management web pages (<http://uwtsd.ac.uk/library/research-data-management/>).

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | YES                                 | NO                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <p>Does the research activity involve personal data (as defined by the Data Protection Act)?</p> <p><b>"personal data"</b> means data which relate to a living individual who can be identified—</p> <p>(a) from those data, or</p> <p>(b) from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller, and includes any expression of opinion about the individual and any indication of the intentions of the data controller or any other person in respect of the individual.</p>                                                                                                                                                                                                                                                                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>If YES, provide a description of the data and explain why this data needs to be collected:</p> <p>I will be collecting pupils' school email addresses for the purposes of identifying pupils' data should they want to withdraw from the process. This data will not be used as part of the actual research and will not be shared with anybody other than the researcher (myself).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                     |                                     |
| <p>Does it involve sensitive personal data (as defined by the Data Protection Act)?</p> <p><b>"Sensitive personal data"</b> means personal data consisting of information as to –</p> <p>(a) the racial or ethnic origin of the data subject,</p> <p>(b) his political opinions,</p> <p>(c) his religious beliefs or other beliefs of a similar nature,</p> <p>(d) whether he is a member of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992),</p> <p>(e) his physical or mental health or condition,</p> <p>(f) his sexual life,</p> <p>(g) the commission or alleged commission by him of any offence, or</p> <p>(h) any proceedings for any offence committed or alleged to have been committed by him, the disposal of such proceedings or the sentence of any court in such proceedings.</p> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p>If YES, provide a description of the data and explain why this data needs to be collected:</p> <p>(this box should expand as you type)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                     |
| Will the research activity involve storing personal data on one of the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | YES                                 | NO                                  |
| Manual files (i.e. in paper form)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| University computers?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Private company computers?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Home or other personal computers?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Laptop computers/ CDs/ Portable disk-drives/ memory sticks?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| "Cloud" storage or websites?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Other – specify:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <p>For all stored data, explain the measures in place to ensure data confidentiality, including details of password protection, encryption and anonymisation:</p> <p>Manual files will be stored securely in locked filing cabinets with the researcher being the only person with key access. Electronic files will be kept on cloud file storage with encryption (google drive). The only device to have files stored directly will be the researcher's laptop (MacBook Pro) with password protection and file encryption. Only the researcher has access to this device which</p>                                                                                                                                                                                                                                                                 |                                     |                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| is normally located at home. Therefore, the only data that may be stored on the laptop would be anonymised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     |                                     |
| Will the research activity involve any of the following activities:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>YES</b>                          | <b>NO</b>                           |
| Electronic transfer of data in any form?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Sharing of data with others at the University?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Sharing of data with other organisations?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Export of data outside the European Union or importing of data from outside the UK?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Use of personal addresses, postcodes, faxes, emails or telephone numbers?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Publication of data that might allow identification of individuals?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Use of data management system?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Data archiving?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| If YES to any question, please provide full details, explaining how this will be conducted in accordance with the Data Protection Act (and/or any international equivalent):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                     |
| <p>Data will be transferred in electronic form as the initial questionnaires will be completed online in Google Forms and the results will be stored using Google Drive in an anonymised manner. Participants will be informed of this beforehand. The data will only be used for the purposes that participants have consented and will only be stored until completion of project. At that point all data will be deleted.</p> <p>Data will potentially be shared with supervising staff at the University. The likelihood of this will be explained to participants before obtaining consent. Any such data would be anonymised.</p> <p>All data will be handled in line with the Data Protection Act 2018 including GDPR.</p> |                                     |                                     |

|                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| List all who will have access to the data generated by the research activity:                                                                                                                                                                 |
| Myself, the researcher (raw and analysed data)<br>University supervisor (analysed data only)                                                                                                                                                  |
| List who will have control of, and act as custodian(s) for, data generated by the research activity:                                                                                                                                          |
| Myself, the researcher.                                                                                                                                                                                                                       |
| Give details of data storage arrangements, including where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.                                                                         |
| Data will be stored electronically on Google Drive as discussed above. Data will be stored until after the final submission and acceptance of the passed dissertation. Data will then be deleted as it is not needed for any future research. |

## SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants.

In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's [Research Ethics and Integrity Code of Practice](#)

**Signature of applicant:** *C Kostromin*

**Date:** 27.02.19

### For students:

|                                 |               |
|---------------------------------|---------------|
| Director of Studies/Supervisor: | Sarah Stewart |
| Signature:                      |               |
| Date:                           |               |

### For staff:

|                                |  |
|--------------------------------|--|
| Head of School/Assistant Dean: |  |
| Signature:                     |  |
| Date:                          |  |

**Checklist:** Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

|                                     |                                                                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | I have read the guidance notes supplied before completing the form.                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | I have completed <b>ALL RELEVANT</b> sections of the form in full.                                                                                                                                                                                      |
| <input type="checkbox"/>            | I confirm that the research activity has received approval in principle                                                                                                                                                                                 |
| <input type="checkbox"/>            | I have attached a copy of final/interim approval from external organisation (where appropriate)                                                                                                                                                         |
| <input type="checkbox"/>            | I have attached a full risk assessment (and have NOT completed Section H of this form) (where appropriate)                                                                                                                                              |
| <input checked="" type="checkbox"/> | I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.                                                                                   |
| <input checked="" type="checkbox"/> | I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Head of School. |

## Appendix D – Pupil Survey

The survey was distributed electronically using Google Forms

### Pupil Questionnaire

#### Social and Emotional Learning

**Your answers will be used in research looking at pupils social and emotional skills and how they affect your learning. You do not have to complete this questionnaire if you do not want to. If you complete it and then change your mind you can do so by informing your teacher, emailing them or telling your Learning Leader. You can do this at any time before the research is finished. You will not be in trouble if you do not want to complete this.**

**Your name will not appear on your responses but your email address is collected – this is so that we can remove your answers if you change your mind. Your teacher will not look at who has answered the questionnaire and will swap your email address for a unique number. The only time they would look at your email address is to remove your answer. This means that your answers are confidential but not anonymous (the teacher is able to identify you if they need to). If you don't understand what this means please ask your teacher or your Learning Leader.**

**If you are happy to take part in the questionnaire please sign the letter you have been given and click continue to start the survey.**

## Grit

How well you are able to persevere through setbacks to achieve important long-term goals.

| Question                                                                                                                                                                                           | Responses          |                  |                  |               |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|------------------|---------------|-------------------|
| How often do you stay focused on the same goal for several months at a time?                                                                                                                       | Almost never       | Once in a while  | Sometimes        | Frequently    | Almost always     |
| If you fail to reach an important goal, how likely are you to try again?                                                                                                                           | Not at all likely  | Slightly likely  | Somewhat likely  | Quite likely  | Extremely likely  |
| When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?                                                                         | Not at all focused | Slightly focused | Somewhat focused | Quite focused | Extremely focused |
| If you have a problem while working towards an important goal, how well can you keep working?                                                                                                      | Not well at all    | Slightly well    | Somewhat well    | Quite well    | Extremely well    |
| Some people pursue some of their goals for a long time, and others change their goals frequently. Over the next several years, how likely are you to continue to pursue one of your current goals? | Not at all likely  | Slightly likely  | Somewhat likely  | Quite likely  | Extremely likely  |

## Growth Mindset

Your perceptions of whether you have the potential to change those factors that are central to your performance in school.

| Question                                                                                                                                                                                                                         | Responses                     |                             |                             |                          |                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|-----------------------------|--------------------------|-------------------------------|
| <i>Whether a person does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for you to change than others. In school, how possible is it for you to change:</i> |                               |                             |                             |                          |                               |
| Being talented                                                                                                                                                                                                                   | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |
| Liking the subjects you are studying                                                                                                                                                                                             | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |
| Your level of intelligence                                                                                                                                                                                                       | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |
| Putting forth a lot of effort                                                                                                                                                                                                    | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |
| Behaving well in class                                                                                                                                                                                                           | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |
| How easily you give up                                                                                                                                                                                                           | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |

## Self-Management — Recommended

How well students manage their emotions, thoughts, and behaviours in different situations.

| Question                                                                                   | Responses    |                 |           |       |                     |
|--------------------------------------------------------------------------------------------|--------------|-----------------|-----------|-------|---------------------|
| <i>During the past 30 days...</i>                                                          |              |                 |           |       |                     |
| How often did you come to class prepared?                                                  | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you follow directions in class?                                              | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you get your work done right away, instead of waiting until the last minute? | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you pay attention and resist distractions?                                   | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| When you were working independently, how often did you stay focused?                       | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you remain calm, even when someone was bothering you or saying bad things?   | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you allow others to speak without interruption?                              | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often were you polite to adults?                                                       | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often were you polite to other students?                                               | Almost never | Once in a while | Sometimes | Often | Almost all the time |
| How often did you keep your temper in check?                                               | Almost never | Once in a while | Sometimes | Often | Almost all the time |

## Social Awareness

How well students consider the perspectives of others and empathize with them.

| Question                                                                           | Responses                |                        |                     |                       |                           |
|------------------------------------------------------------------------------------|--------------------------|------------------------|---------------------|-----------------------|---------------------------|
| <i>During the past 30 days...</i>                                                  |                          |                        |                     |                       |                           |
| How carefully did you listen to other people's points of view?                     | Not carefully at all     | Slightly carefully     | Somewhat carefully  | Quite carefully       | Extremely carefully       |
| How much did you care about other people's feelings?                               | Did not care at all      | Cared a little bit     | Cared somewhat      | Cared quite a bit     | Cared a tremendous amount |
| How often did you compliment others' accomplishments?                              | Almost never             | Once in a while        | Sometimes           | Often                 | Almost all the time       |
| How well did you get along with students who are different from you?               | Did not get along at all | Got along a little bit | Got along somewhat  | Got along pretty well | Got along extremely well  |
| How clearly were you able to describe your feelings?                               | Not at all clearly       | Slightly clearly       | Somewhat clearly    | Quite clearly         | Extremely clearly         |
| When others disagreed with you, how respectful were you of their views?            | Not at all respectful    | Slightly respectful    | Somewhat respectful | Quite respectful      | Extremely respectful      |
| To what extent were you able to stand up for yourself without putting others down? | Not at all               | A little bit           | Somewhat            | Quite a bit           | A tremendous amount       |
| To what extent were you able to disagree with others without starting an argument? | Not at all               | A little bit           | Somewhat            | Quite a bit           | A tremendous amount       |

## Appendix E – Class Dojo Teacher Behaviour Observation Tool

|                                                                                                                                  |                                                                                                                               |                                                                                                                                     |                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|  <span>1</span><br>Demonstrating Effort         |  <span>1</span><br>Listening to Peers        |  <span>1</span><br>Making Decisions              |  <span>1</span><br>On Task                 |
|  <span>1</span><br>Persistence                  |  <span>1</span><br>Positive Comment to a     |  <span>1</span><br>Responding Well to            |  <span>1</span><br>Solving a Problem       |
|  <span>1</span><br>Teamwork                     | <br>Add skill                                |                                                                                                                                     |                                                                                                                               |
|  <span>-1</span><br>Arguing with group        |  <span>-1</span><br>Disrespectful response |  <span>-1</span><br>Ignoring feedback          |  <span>-1</span><br>Low level disruption |
|  <span>-1</span><br>Negative comment to a     |  <span>-1</span><br>Non-participation/Noi  |  <span>-1</span><br>Not following instructions |  <span>-1</span><br>Off task             |
|  <span>-1</span><br>Relying on others instead |  <span>-1</span><br>Shouting out           | <br>Add skill                                  |                                                                                                                               |

## Appendix F – Data from Pupil Surveys

### Examples of Data from Pupil Survey

#### Grit – Before Intervention

|    |       | <b>G1 How often do you stay focused on the same goal for several months at a time?</b> | <b>G2 If you fail to reach an important goal, how likely are you to try again?</b> | <b>G3 When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?</b> | <b>G4 If you have a problem while working towards an important goal, how well can you keep working?</b> | <b>G5 Some people pursue some of their goals for a long time, and others change their goals frequently. Over the next several years, how likely are you to continue to pursue one of your current goals?</b> | <b>Grit Score</b> |
|----|-------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1  | Set 1 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Quite focused                                                                                                                      | 4 Somewhat well                                                                                         | 3 Slightly likely                                                                                                                                                                                            | 2 3               |
| 2  | Set 1 | Frequently                                                                             | 4 Quite likely                                                                     | 4 Extremely focused                                                                                                                  | 5 Quite well                                                                                            | 4 Somewhat likely                                                                                                                                                                                            | 3 4               |
| 3  | Set 1 | Once in a while                                                                        | 2 Somewhat likely                                                                  | 3 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Not at all likely                                                                                                                                                                                          | 1 2.4             |
| 4  | Set 2 | Frequently                                                                             | 4 Somewhat likely                                                                  | 3 Somewhat focused                                                                                                                   | 3 Slightly well                                                                                         | 2 Not at all likely                                                                                                                                                                                          | 1 2.6             |
| 5  | Set 2 | Almost never                                                                           | 1 Slightly likely                                                                  | 2 Slightly focused                                                                                                                   | 2 Quite well                                                                                            | 4 Not at all likely                                                                                                                                                                                          | 1 2               |
| 6  | Set 3 | Frequently                                                                             | 4 Somewhat likely                                                                  | 3 Not at all focused                                                                                                                 | 1 Somewhat well                                                                                         | 3 Somewhat likely                                                                                                                                                                                            | 3 2.8             |
| 7  | Set 2 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Somewhat likely                                                                                                                                                                                            | 3 3               |
| 8  | Set 3 | Once in a while                                                                        | 2 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.4             |
| 9  | Set 1 | Once in a while                                                                        | 2 Quite likely                                                                     | 4 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.6             |
| 10 | Set 2 | Frequently                                                                             | 4 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Quite likely                                                                                                                                                                                               | 4 3.6             |
| 11 | Set 3 | Sometimes                                                                              | 3 Extremely likely                                                                 | 5 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 4               |
| 12 | Set 1 | Frequently                                                                             | 4 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Quite likely                                                                                                                                                                                               | 4 3.6             |
| 13 | Set 3 | Sometimes                                                                              | 3 Slightly likely                                                                  | 2 Slightly focused                                                                                                                   | 2 Somewhat well                                                                                         | 3 Slightly likely                                                                                                                                                                                            | 2 2.4             |
| 14 | Set 1 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Slightly focused                                                                                                                   | 2 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.2             |
| 15 | Set 1 | Frequently                                                                             | 4 Extremely likely                                                                 | 5 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 4.2             |
| 16 | Set 3 | Once in a while                                                                        | 2 Slightly likely                                                                  | 2 Not at all focused                                                                                                                 | 1 Slightly well                                                                                         | 2 Slightly likely                                                                                                                                                                                            | 2 1.8             |

|    |       |                 |   |                   |   |                   |   |                 |   |                  |   |     |
|----|-------|-----------------|---|-------------------|---|-------------------|---|-----------------|---|------------------|---|-----|
| 17 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Somewhat focused  | 3 | Somewhat well   | 3 | Quite likely     | 4 | 3.4 |
| 18 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Quite focused     | 4 | Quite well      | 4 | Somewhat likely  | 3 | 3.6 |
| 19 | Set 3 | Frequently      | 4 | Quite likely      | 4 | Quite focused     | 4 | Quite well      | 4 | Quite likely     | 4 | 4   |
| 20 | Set 1 | Almost always   | 5 | Extremely likely  | 5 | Quite focused     | 4 | Somewhat well   | 3 | Somewhat likely  | 3 | 4   |
| 21 | Set 1 | Sometimes       | 3 | Somewhat likely   | 3 | Quite focused     | 4 | Quite well      | 4 | Quite likely     | 4 | 3.6 |
| 22 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Quite focused     | 4 | Quite well      | 4 | Quite likely     | 4 | 3.8 |
| 23 | Set 2 | Once in a while | 2 | Slightly likely   | 2 | Quite focused     | 4 | Quite well      | 4 | Slightly likely  | 2 | 2.8 |
| 24 | Set 1 | Sometimes       | 3 | Slightly likely   | 2 | Quite focused     | 4 | Quite well      | 4 | Somewhat likely  | 3 | 3.2 |
| 25 | Set 3 | Sometimes       | 3 | Extremely likely  | 5 | Slightly focused  | 2 | Slightly well   | 2 | Extremely likely | 5 | 3.4 |
| 26 | Set 3 | Frequently      | 4 | Extremely likely  | 5 | Quite focused     | 4 | Somewhat well   | 3 | Slightly likely  | 2 | 3.6 |
| 27 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Quite focused     | 4 | Quite well      | 4 | Quite likely     | 4 | 3.8 |
| 28 | Set 2 | Sometimes       | 3 | Somewhat likely   | 3 | Slightly focused  | 2 | Quite well      | 4 | Slightly likely  | 2 | 2.8 |
| 29 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Somewhat focused  | 3 | Somewhat well   | 3 | Slightly likely  | 2 | 3   |
| 30 | Set 3 | Frequently      | 4 | Quite likely      | 4 | Extremely focused | 5 | Quite well      | 4 | Somewhat likely  | 3 | 4   |
| 31 | Set 3 | Sometimes       | 3 | Slightly likely   | 2 | Slightly focused  | 2 | Slightly well   | 2 | Slightly likely  | 2 | 2.2 |
| 32 | Set 3 | Once in a while | 2 | Quite likely      | 4 | Slightly focused  | 2 | Somewhat well   | 3 | Slightly likely  | 2 | 2.6 |
| 33 | Set 2 | Sometimes       | 3 | Somewhat likely   | 3 | Somewhat focused  | 3 | Somewhat well   | 3 | Quite likely     | 4 | 3.2 |
| 34 | Set 1 | Frequently      | 4 | Somewhat likely   | 3 | Quite focused     | 4 | Quite well      | 4 | Extremely likely | 5 | 4   |
| 35 | Set 3 | Once in a while | 2 | Somewhat likely   | 3 | Quite focused     | 4 | Somewhat well   | 3 | Somewhat likely  | 3 | 3   |
| 36 | Set 1 | Once in a while | 2 | Slightly likely   | 2 | Slightly focused  | 2 | Somewhat well   | 3 | Quite likely     | 4 | 2.6 |
| 37 | Set 2 | Sometimes       | 3 | Not at all likely | 1 | Extremely focused | 5 | Not well at all | 1 | Slightly likely  | 2 | 2.4 |
| 38 | Set 3 | Almost always   | 5 | Quite likely      | 4 | Extremely focused | 5 | Somewhat well   | 3 | Quite likely     | 4 | 4.2 |
| 39 | Set 1 | Frequently      | 4 | Somewhat likely   | 3 | Quite focused     | 4 | Slightly well   | 2 | Somewhat likely  | 3 | 3.2 |
| 40 | Set 3 | Sometimes       | 3 | Quite likely      | 4 | Quite focused     | 4 | Somewhat well   | 3 | Extremely likely | 5 | 3.8 |
| 41 | Set 1 | Once in a while | 2 | Quite likely      | 4 | Extremely focused | 5 | Somewhat well   | 3 | Quite likely     | 4 | 3.6 |
| 42 | Set 1 | Frequently      | 4 | Quite likely      | 4 | Extremely focused | 5 | Somewhat well   | 3 | Somewhat likely  | 3 | 3.8 |
| 43 | Set 2 | Sometimes       | 3 | Quite likely      | 4 | Somewhat focused  | 3 | Somewhat well   | 3 | Somewhat likely  | 3 | 3.2 |
| 44 | Set 1 | Almost always   | 5 | Somewhat likely   | 3 | Quite focused     | 4 | Quite well      | 4 | Somewhat likely  | 3 | 3.8 |

[illegible]

## Grit – After Intervention

|    |       | <b>G1 How often do you stay focused on the same goal for several months at a time?</b> | <b>G2 If you fail to reach an important goal, how likely are you to try again?</b> | <b>G3 When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?</b> | <b>G4 If you have a problem while working towards an important goal, how well can you keep working?</b> | <b>G5 Some people pursue some of their goals for a long time, and others change their goals frequently. Over the next several years, how likely are you to continue to pursue one of your current goals?</b> | <b>Grit Score</b> |
|----|-------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1  | Set 1 | Once in a while                                                                        | 2 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Somewhat likely                                                                                                                                                                                            | 3 3               |
| 2  | Set 1 | Almost always                                                                          | 5 Quite likely                                                                     | 4 Extremely focused                                                                                                                  | 5 Quite well                                                                                            | 4 Not at all likely                                                                                                                                                                                          | 1 3.8             |
| 3  | Set 1 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Quite focused                                                                                                                      | 4 Somewhat well                                                                                         | 3 Not at all likely                                                                                                                                                                                          | 1 2.8             |
| 4  | Set 2 | Sometimes                                                                              | 3 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.6             |
| 5  | Set 2 | Almost always                                                                          | 5 Somewhat likely                                                                  | 3 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Quite likely                                                                                                                                                                                               | 4 3.6             |
| 6  | Set 3 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Quite focused                                                                                                                      | 4 Somewhat well                                                                                         | 3 Not at all likely                                                                                                                                                                                          | 1 2.8             |
| 7  | Set 2 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Slightly focused                                                                                                                   | 2 Somewhat well                                                                                         | 3 Quite likely                                                                                                                                                                                               | 4 3               |
| 8  | Set 3 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Somewhat focused                                                                                                                   | 3 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.4             |
| 9  | Set 1 | Once in a while                                                                        | 2 Somewhat likely                                                                  | 3 Extremely focused                                                                                                                  | 5 Quite well                                                                                            | 4 Extremely likely                                                                                                                                                                                           | 5 3.8             |
| 10 | Set 2 | Almost always                                                                          | 5 Quite likely                                                                     | 4 Somewhat focused                                                                                                                   | 3 Quite well                                                                                            | 4 Extremely likely                                                                                                                                                                                           | 5 4.2             |
| 11 | Set 3 | Once in a while                                                                        | 2 Quite likely                                                                     | 4 Not at all focused                                                                                                                 | 1 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3               |
| 12 | Set 1 | Almost always                                                                          | 5 Quite likely                                                                     | 4 Extremely focused                                                                                                                  | 5 Quite well                                                                                            | 4 Somewhat likely                                                                                                                                                                                            | 3 4.2             |
| 13 | Set 3 | Sometimes                                                                              | 3 Quite likely                                                                     | 4 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 3.8             |
| 14 | Set 1 | Frequently                                                                             | 4 Extremely likely                                                                 | 5 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 4.2             |
| 15 | Set 1 | Almost always                                                                          | 5 Extremely likely                                                                 | 5 Extremely focused                                                                                                                  | 5 Quite well                                                                                            | 4 Extremely likely                                                                                                                                                                                           | 5 4.8             |
| 16 | Set 3 | Sometimes                                                                              | 3 Somewhat likely                                                                  | 3 Not at all focused                                                                                                                 | 1 Somewhat well                                                                                         | 3 Quite likely                                                                                                                                                                                               | 4 2.8             |
| 17 | Set 2 | Frequently                                                                             | 4 Quite likely                                                                     | 4 Quite focused                                                                                                                      | 4 Quite well                                                                                            | 4 Quite likely                                                                                                                                                                                               | 4 4               |
| 18 | Set 2 | Almost never                                                                           | 1 Not at all likely                                                                | 1 Somewhat focused                                                                                                                   | 3 Somewhat well                                                                                         | 3 Slightly likely                                                                                                                                                                                            | 2 2               |
| 19 | Set 3 | Frequently                                                                             | 4 Quite likely                                                                     | 4 Quite focused                                                                                                                      | 4 Slightly well                                                                                         | 2 Somewhat likely                                                                                                                                                                                            | 3 3.4             |

|    |       |                 |   |                  |   |                   |   |               |   |                   |   |     |
|----|-------|-----------------|---|------------------|---|-------------------|---|---------------|---|-------------------|---|-----|
| 20 | Set 1 | Frequently      | 4 | Quite likely     | 4 | Somewhat focused  | 3 | Somewhat well | 3 | Somewhat likely   | 3 | 3.4 |
| 21 | Set 1 | Frequently      | 4 | Quite likely     | 4 | Quite focused     | 4 | Somewhat well | 3 | Somewhat likely   | 3 | 3.6 |
| 22 | Set 2 | Sometimes       | 3 | Somewhat likely  | 3 | Somewhat focused  | 3 | Somewhat well | 3 | Quite likely      | 4 | 3.2 |
| 23 | Set 2 | Frequently      | 4 | Somewhat likely  | 3 | Slightly focused  | 2 | Slightly well | 2 | Somewhat likely   | 3 | 2.8 |
| 24 | Set 1 | Frequently      | 4 | Quite likely     | 4 | Quite focused     | 4 | Quite well    | 4 | Somewhat likely   | 3 | 3.8 |
| 25 | Set 3 | Frequently      | 4 | Quite likely     | 4 | Somewhat focused  | 3 | Quite well    | 4 | Extremely likely  | 5 | 4   |
| 26 | Set 3 | Almost always   | 5 | Quite likely     | 4 | Somewhat focused  | 3 | Somewhat well | 3 | Extremely likely  | 5 | 4   |
| 27 | Set 2 | Almost always   | 5 | Extremely likely | 5 | Extremely focused | 5 | Quite well    | 4 | Somewhat likely   | 3 | 4.4 |
| 28 | Set 2 | Sometimes       | 3 | Quite likely     | 4 | Quite focused     | 4 | Somewhat well | 3 | Slightly likely   | 2 | 3.2 |
| 29 | Set 2 | Once in a while | 2 | Slightly likely  | 2 | Somewhat focused  | 3 | Slightly well | 2 | Not at all likely | 1 | 2   |
| 30 | Set 3 | Frequently      | 4 | Extremely likely | 5 | Extremely focused | 5 | Quite well    | 4 | Quite likely      | 4 | 4.4 |
| 31 | Set 3 | Once in a while | 2 | Slightly likely  | 2 | Somewhat focused  | 3 | Slightly well | 2 | Somewhat likely   | 3 | 2.4 |
| 32 | Set 3 | Frequently      | 4 | Quite likely     | 4 | Extremely focused | 5 | Quite well    | 4 | Quite likely      | 4 | 4.2 |
| 33 | Set 2 | Frequently      | 4 | Quite likely     | 4 | Somewhat focused  | 3 | Somewhat well | 3 | Quite likely      | 4 | 3.6 |
| 34 | Set 1 | Almost always   | 5 | Quite likely     | 4 | Somewhat focused  | 3 | Somewhat well | 3 | Extremely likely  | 5 | 4   |
| 35 | Set 3 | Sometimes       | 3 | Somewhat likely  | 3 | Quite focused     | 4 | Quite well    | 4 | Quite likely      | 4 | 3.6 |
| 36 | Set 1 | Once in a while | 2 | Slightly likely  | 2 | Somewhat focused  | 3 | Slightly well | 2 | Somewhat likely   | 3 | 2.4 |
| 37 | Set 2 | Sometimes       | 3 | Quite likely     | 4 | Extremely focused | 5 | Quite well    | 4 | Extremely likely  | 5 | 4.2 |
| 38 | Set 3 | Almost always   | 5 | Extremely likely | 5 | Extremely focused | 5 | Quite well    | 4 | Extremely likely  | 5 | 4.8 |
| 39 | Set 1 | Sometimes       | 3 | Quite likely     | 4 | Quite focused     | 4 | Somewhat well | 3 | Not at all likely | 1 | 3   |
| 40 | Set 3 | Sometimes       | 3 | Somewhat likely  | 3 | Quite focused     | 4 | Slightly well | 2 | Somewhat likely   | 3 | 3   |
| 41 | Set 1 | Sometimes       | 3 | Quite likely     | 4 | Somewhat focused  | 3 | Quite well    | 4 | Quite likely      | 4 | 3.6 |
| 42 | Set 1 | Sometimes       | 3 | Quite likely     | 4 | Quite focused     | 4 | Somewhat well | 3 | Somewhat likely   | 3 | 3.4 |
| 43 | Set 2 | Sometimes       | 3 | Quite likely     | 4 | Quite focused     | 4 | Somewhat well | 3 | Somewhat likely   | 3 | 3.4 |
| 44 | Set 1 | Sometimes       | 3 | Somewhat likely  | 3 | Quite focused     | 4 | Somewhat well | 3 | Slightly likely   | 2 | 3   |
| 45 | Set 1 | Once in a while | 2 | Somewhat likely  | 3 | Slightly focused  | 2 | Somewhat well | 3 | Slightly likely   | 2 | 2.4 |
| 46 | Set 2 | Once in a while | 2 | Somewhat likely  | 3 | Quite focused     | 4 | Quite well    | 4 | Somewhat likely   | 3 | 3.2 |
| 47 | Set 2 | Once in a while | 2 | Slightly likely  | 2 | Slightly focused  | 2 | Slightly well | 2 | Quite likely      | 4 | 2.4 |

[illegible]

Growth Mindset – Before Intervention

| GM1 Whether a person does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for you to change than others. In school, how possible is it for you to change: Being talented |   | GM2 Liking the subjects you are studying |   | GM3 Your level of intelligence |   | GM4 Putting forth a lot of effort |   | GM5 Behaving well in class    |   | GM6 How easily you give up    |   |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------|---|--------------------------------|---|-----------------------------------|---|-------------------------------|---|-------------------------------|---|------|
| Quite possible to change                                                                                                                                                                                                                     | 4 | Somewhat possible to change              | 3 | Quite possible to change       | 4 | Somewhat possible to change       | 3 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | 3.50 |
| Quite possible to change                                                                                                                                                                                                                     | 4 | Somewhat possible to change              | 3 | Quite possible to change       | 4 | Somewhat possible to change       | 3 | Quite possible to change      | 4 | Somewhat possible to change   | 3 | 3.50 |
| Somewhat possible to change                                                                                                                                                                                                                  | 3 | A little possible to change              | 2 | Quite possible to change       | 4 | Somewhat possible to change       | 3 | Quite possible to change      | 4 | Quite possible to change      | 4 | 3.33 |
| Quite possible to change                                                                                                                                                                                                                     | 4 | Completely possible to change            | 5 | Somewhat possible to change    | 3 | Quite possible to change          | 4 | Completely possible to change | 5 | Completely possible to change | 5 | 4.33 |
| Somewhat possible to change                                                                                                                                                                                                                  | 3 | A little possible to change              | 2 | Quite possible to change       | 4 | A little possible to change       | 2 | Quite possible to change      | 4 | A little possible to change   | 2 | 2.83 |
| Somewhat possible to change                                                                                                                                                                                                                  | 3 | Somewhat possible to change              | 3 | Somewhat possible to change    | 3 | Quite possible to change          | 4 | A little possible to change   | 2 | Quite possible to change      | 4 | 3.17 |
| Somewhat possible to change                                                                                                                                                                                                                  | 3 | Somewhat possible to change              | 3 | Somewhat possible to change    | 3 | Somewhat possible to change       | 3 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | 3.00 |
| Somewhat possible to change                                                                                                                                                                                                                  | 3 | Somewhat possible to change              | 3 | Somewhat possible to change    | 3 | Somewhat possible to change       | 3 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | 3.00 |
| Quite possible to change                                                                                                                                                                                                                     | 4 | Somewhat possible to change              | 3 | Quite possible to change       | 4 | Quite possible to change          | 4 | Completely possible to change | 5 | Completely possible to change | 5 | 4.17 |
| Not at all possible to change                                                                                                                                                                                                                | 1 | A little possible to change              | 2 | Somewhat possible to change    | 3 | Quite possible to change          | 4 | A little possible to change   | 2 | Quite possible to change      | 4 | 2.67 |
| Quite possible to change                                                                                                                                                                                                                     | 4 | Completely possible to change            | 5 | Quite possible to change       | 4 | Completely possible to change     | 5 | Completely possible to change | 5 | Completely possible to change | 5 | 4.67 |
| Quite possible to change                                                                                                                                                                                                                     | 4 | Somewhat possible to change              | 3 | Somewhat possible to change    | 3 | A little possible to change       | 2 | Not at all possible to change | 1 | Somewhat possible to change   | 3 | 2.67 |

[illegible]

[illegible]

[illegible]

### Growth Mindset – After Intervention

[illegible]

[illegible]

|                               |   |                             |   |                               |   |                               |   |                               |   |      |
|-------------------------------|---|-----------------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|---|------|
| Somewhat possible to change   | 3 | Quite possible to change    | 4 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | 3.17 |
| Somewhat possible to change   | 3 | A little possible to change | 2 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | Somewhat possible to change   | 3 | 3.17 |
| Quite possible to change      | 4 | Somewhat possible to change | 3 | Quite possible to change      | 4 | Completely possible to change | 5 | Quite possible to change      | 4 | 4.00 |
| A little possible to change   | 2 | Quite possible to change    | 4 | Completely possible to change | 5 | Quite possible to change      | 4 | A little possible to change   | 2 | 3.50 |
| Quite possible to change      | 4 | A little possible to change | 2 | Completely possible to change | 5 | Completely possible to change | 5 | Completely possible to change | 5 | 4.33 |
| Not at all possible to change | 1 | Quite possible to change    | 4 | Quite possible to change      | 4 | Completely possible to change | 5 | Completely possible to change | 5 | 4.00 |
| Quite possible to change      | 4 | Quite possible to change    | 4 | Completely possible to change | 5 | Completely possible to change | 5 | Quite possible to change      | 4 | 4.33 |
| Quite possible to change      | 4 | Quite possible to change    | 4 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | A little possible to change   | 2 | 3.67 |
| Completely possible to change | 5 | Somewhat possible to change | 3 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | 3.67 |
| Somewhat possible to change   | 3 | Somewhat possible to change | 3 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | A little possible to change   | 2 | 2.83 |
| Somewhat possible to change   | 3 | Quite possible to change    | 4 | Completely possible to change | 5 | Completely possible to change | 5 | Completely possible to change | 5 | 4.50 |
| Quite possible to change      | 4 | A little possible to change | 2 | Somewhat possible to change   | 3 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | 3.00 |
| Quite possible to change      | 4 | Quite possible to change    | 4 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | Quite possible to change      | 4 | 3.50 |
| A little possible to change   | 2 | A little possible to change | 2 | A little possible to change   | 2 | A little possible to change   | 2 | Somewhat possible to change   | 3 | 2.33 |
| A little possible to change   | 2 | A little possible to change | 2 | Somewhat possible to change   | 3 | A little possible to change   | 2 | Somewhat possible to change   | 3 | 2.50 |
| Somewhat possible to change   | 3 | Quite possible to change    | 4 | Completely possible to change | 5 | Completely possible to change | 5 | Completely possible to change | 5 | 4.50 |
| Not at all possible to change | 1 | Somewhat possible to change | 3 | Quite possible to change      | 4 | Somewhat possible to change   | 3 | A little possible to change   | 2 | 2.33 |
| Somewhat possible to change   | 3 | A little possible to change | 2 | Quite possible to change      | 4 | Quite possible to change      | 4 | Quite possible to change      | 4 | 3.17 |
| Quite possible to change      | 4 | Quite possible to change    | 4 | Somewhat possible to change   | 3 | Quite possible to change      | 4 | Quite possible to change      | 4 | 3.83 |

[illegible]

## Appendix G – Pupil Panorama Survey Responses for Growth Mindset

GM1 – In school, how possible is it for you to change: Being talented?

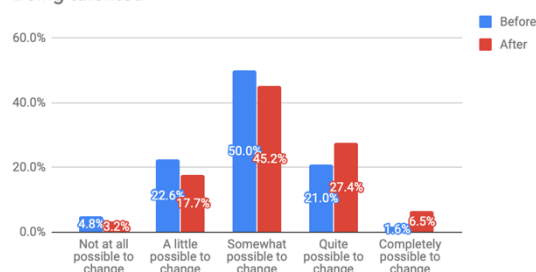
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 3      | 2     | 4.8%   | 3.2%  |
| A little possible   | 14     | 11    | 22.6%  | 17.7% |
| Somewhat possible   | 31     | 28    | 50.0%  | 45.2% |
| Quite possible      | 13     | 17    | 21.0%  | 27.4% |
| Completely possible | 1      | 4     | 1.6%   | 6.5%  |
| Positive            |        | 22.6% | 11.3%  | 33.9% |
| Negative            |        | 27.4% | -6.5%  | 21.0% |
| Neutral             |        | 50.0% | -4.8%  | 45.2% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 1     | 5.0%   | 5.0%  |
| A little possible   | 3      | 3     | 15.0%  | 15.0% |
| Somewhat possible   | 9      | 9     | 45.0%  | 45.0% |
| Quite possible      | 6      | 7     | 30.0%  | 35.0% |
| Completely possible | 1      | 0     | 5.0%   | 0.0%  |
| Positive            |        | 35.0% | 0.0%   | 35.0% |
| Negative            |        | 20.0% | 0.0%   | 20.0% |
| Neutral             |        | 45.0% | 0.0%   | 45.0% |

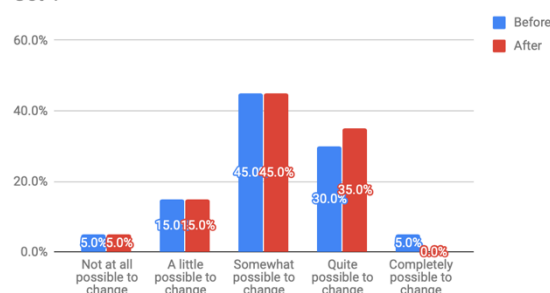
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 2      | 0     | 9.5%   | 0.0%  |
| A little possible   | 2      | 2     | 9.5%   | 9.5%  |
| Somewhat possible   | 13     | 8     | 61.9%  | 38.1% |
| Quite possible      | 4      | 9     | 19.0%  | 42.9% |
| Completely possible | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 19.0% | 33.3%  | 52.4% |
| Negative            |        | 19.0% | -9.5%  | 9.5%  |
| Neutral             |        | 61.9% | -23.8% | 38.1% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 1     | 0.0%   | 4.8%  |
| A little possible   | 9      | 6     | 42.9%  | 28.6% |
| Somewhat possible   | 9      | 11    | 42.9%  | 52.4% |
| Quite possible      | 3      | 1     | 14.3%  | 4.8%  |
| Completely possible | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 14.3% | 0.0%   | 14.3% |
| Negative            |        | 42.9% | -9.5%  | 33.3% |
| Neutral             |        | 42.9% | 9.5%   | 52.4% |

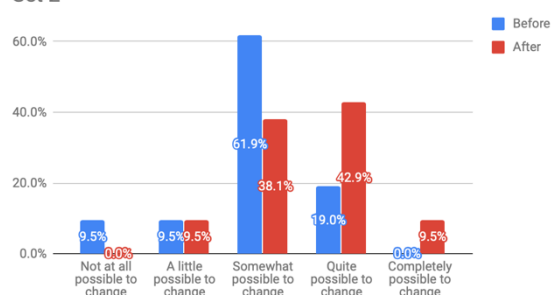
GM1 In school, how possible is it for you to change: Being talented



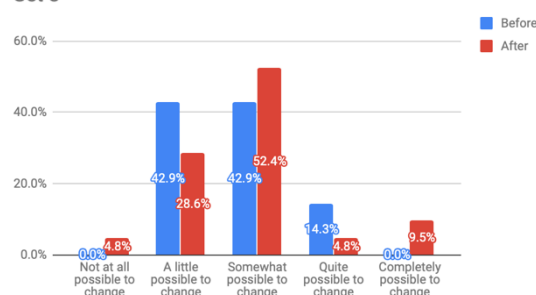
Set 1



Set 2



Set 3



GM2 – In school, how possible is it for you to change: Liking the subjects you are studying?

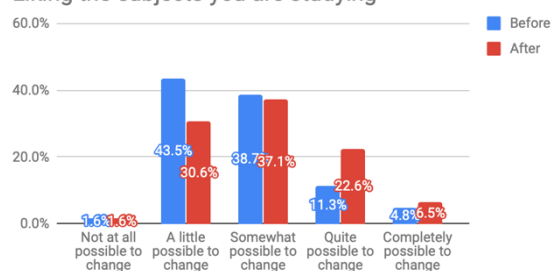
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 1     | 1.6%   | 1.6%  |
| A little possible   | 27     | 19    | 43.5%  | 30.6% |
| Somewhat possible   | 24     | 23    | 38.7%  | 37.1% |
| Quite possible      | 7      | 14    | 11.3%  | 22.6% |
| Completely possible | 3      | 4     | 4.8%   | 6.5%  |
| Positive            |        | 16.1% | 12.9%  | 29.0% |
| Negative            |        | 45.2% | -12.9% | 32.3% |
| Neutral             |        | 38.7% | -1.6%  | 37.1% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 0     | 0.0%   | 0.0%  |
| A little possible   | 6      | 4     | 30.0%  | 20.0% |
| Somewhat possible   | 10     | 6     | 50.0%  | 30.0% |
| Quite possible      | 3      | 8     | 15.0%  | 40.0% |
| Completely possible | 1      | 1     | 5.0%   | 5.0%  |
| Positive            |        | 20.0% | 25.0%  | 45.0% |
| Negative            |        | 30.0% | -10.0% | 20.0% |
| Neutral             |        | 50.0% | -20.0% | 30.0% |

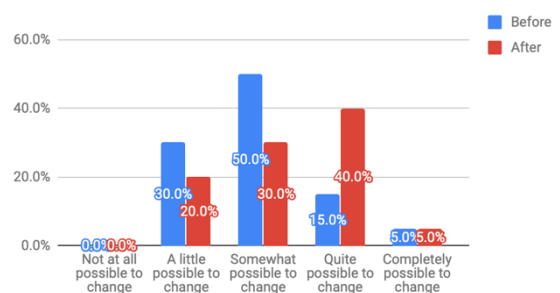
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 0     | 0.0%   | 0.0%  |
| A little possible   | 9      | 7     | 42.9%  | 33.3% |
| Somewhat possible   | 9      | 7     | 42.9%  | 33.3% |
| Quite possible      | 2      | 6     | 9.5%   | 28.6% |
| Completely possible | 1      | 1     | 4.8%   | 4.8%  |
| Positive            |        | 14.3% | 19.0%  | 33.3% |
| Negative            |        | 42.9% | -9.5%  | 33.3% |
| Neutral             |        | 42.9% | -9.5%  | 33.3% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 1     | 4.8%   | 4.8%  |
| A little possible   | 12     | 8     | 57.1%  | 38.1% |
| Somewhat possible   | 5      | 10    | 23.8%  | 47.6% |
| Quite possible      | 2      | 0     | 9.5%   | 0.0%  |
| Completely possible | 1      | 2     | 4.8%   | 9.5%  |
| Positive            |        | 14.3% | -4.8%  | 9.5%  |
| Negative            |        | 61.9% | -19.0% | 42.9% |
| Neutral             |        | 23.8% | 23.8%  | 47.6% |

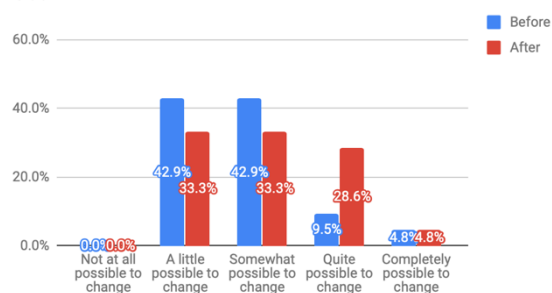
GM2 In school, how possible is it for you to change: Liking the subjects you are studying



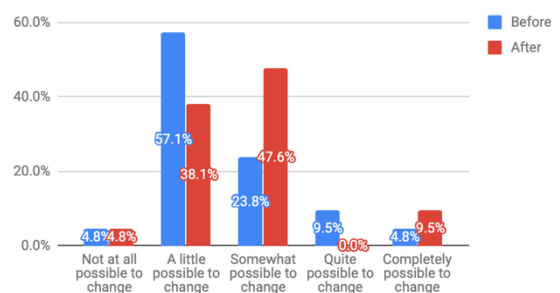
Set 1



Set 2



Set 3



GM3 – In school, how possible is it for you to change: Your level of intelligence?

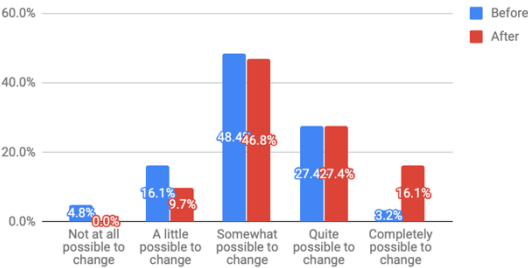
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 3      | 0     | 4.8%   | 0.0%  |
| A little possible   | 10     | 6     | 16.1%  | 9.7%  |
| Somewhat possible   | 30     | 29    | 48.4%  | 46.8% |
| Quite possible      | 17     | 17    | 27.4%  | 27.4% |
| Completely possible | 2      | 10    | 3.2%   | 16.1% |
| Positive            |        | 30.6% | 12.9%  | 43.5% |
| Negative            |        | 21.0% | -11.3% | 9.7%  |
| Neutral             |        | 48.4% | -1.6%  | 46.8% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 2      | 0     | 10.0%  | 0.0%  |
| A little possible   | 3      | 1     | 15.0%  | 5.0%  |
| Somewhat possible   | 8      | 9     | 40.0%  | 45.0% |
| Quite possible      | 5      | 5     | 25.0%  | 25.0% |
| Completely possible | 2      | 5     | 10.0%  | 25.0% |
| Positive            |        | 35.0% | 15.0%  | 50.0% |
| Negative            |        | 25.0% | -20.0% | 5.0%  |
| Neutral             |        | 40.0% | 5.0%   | 45.0% |

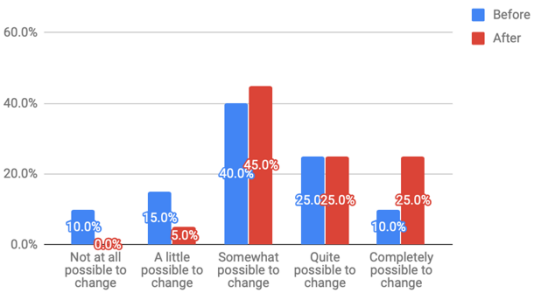
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 0     | 0.0%   | 0.0%  |
| A little possible   | 3      | 2     | 14.3%  | 9.5%  |
| Somewhat possible   | 12     | 11    | 57.1%  | 52.4% |
| Quite possible      | 6      | 5     | 28.6%  | 23.8% |
| Completely possible | 0      | 3     | 0.0%   | 14.3% |
| Positive            |        | 28.6% | 9.5%   | 38.1% |
| Negative            |        | 14.3% | -4.8%  | 9.5%  |
| Neutral             |        | 57.1% | -4.8%  | 52.4% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 0     | 4.8%   | 0.0%  |
| A little possible   | 4      | 3     | 19.0%  | 14.3% |
| Somewhat possible   | 10     | 9     | 47.6%  | 42.9% |
| Quite possible      | 6      | 7     | 28.6%  | 33.3% |
| Completely possible | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 28.6% | 14.3%  | 42.9% |
| Negative            |        | 23.8% | -9.5%  | 14.3% |
| Neutral             |        | 47.6% | -4.8%  | 42.9% |

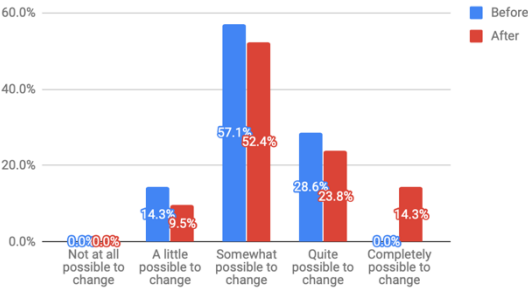
GM3 In school, how possible is it for you to change:  
Your level of intelligence



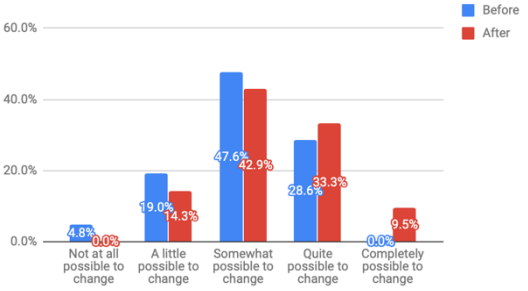
Set 1



Set 2



Set 3



GM4 – In school, how possible is it for you to change: Putting forth a lot of effort?

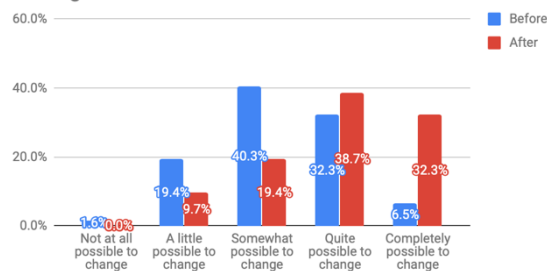
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 0     | 1.6%   | 0.0%  |
| A little possible   | 12     | 6     | 19.4%  | 9.7%  |
| Somewhat possible   | 25     | 12    | 40.3%  | 19.4% |
| Quite possible      | 20     | 24    | 32.3%  | 38.7% |
| Completely possible | 4      | 20    | 6.5%   | 32.3% |
| Positive            |        | 38.7% | 32.3%  | 71.0% |
| Negative            |        | 21.0% | -11.3% | 9.7%  |
| Neutral             |        | 40.3% | -21.0% | 19.4% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 0     | 5.0%   | 0.0%  |
| A little possible   | 3      | 2     | 15.0%  | 10.0% |
| Somewhat possible   | 10     | 3     | 50.0%  | 15.0% |
| Quite possible      | 5      | 5     | 25.0%  | 25.0% |
| Completely possible | 1      | 10    | 5.0%   | 50.0% |
| Positive            |        | 30.0% | 45.0%  | 75.0% |
| Negative            |        | 20.0% | -10.0% | 10.0% |
| Neutral             |        | 50.0% | -35.0% | 15.0% |

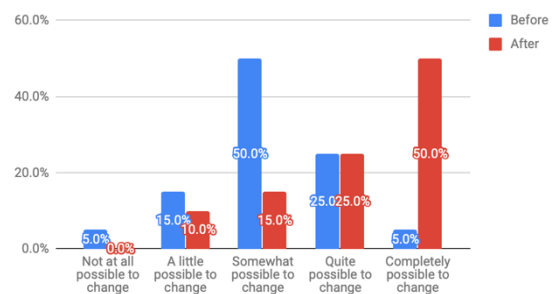
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 0     | 0.0%   | 0.0%  |
| A little possible   | 4      | 1     | 19.0%  | 4.8%  |
| Somewhat possible   | 5      | 5     | 23.8%  | 23.8% |
| Quite possible      | 11     | 9     | 52.4%  | 42.9% |
| Completely possible | 1      | 6     | 4.8%   | 28.6% |
| Positive            |        | 57.1% | 14.3%  | 71.4% |
| Negative            |        | 19.0% | -14.3% | 4.8%  |
| Neutral             |        | 23.8% | 0.0%   | 23.8% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 0      | 0     | 0.0%   | 0.0%  |
| A little possible   | 5      | 3     | 23.8%  | 14.3% |
| Somewhat possible   | 10     | 4     | 47.6%  | 19.0% |
| Quite possible      | 4      | 10    | 19.0%  | 47.6% |
| Completely possible | 2      | 4     | 9.5%   | 19.0% |
| Positive            |        | 28.6% | 38.1%  | 66.7% |
| Negative            |        | 23.8% | -9.5%  | 14.3% |
| Neutral             |        | 47.6% | -28.6% | 19.0% |

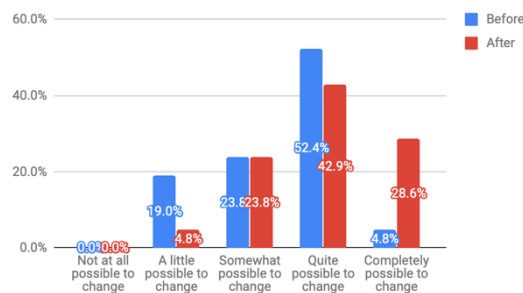
GM4 In school, how possible is it for you to change: Putting forth a lot of effort



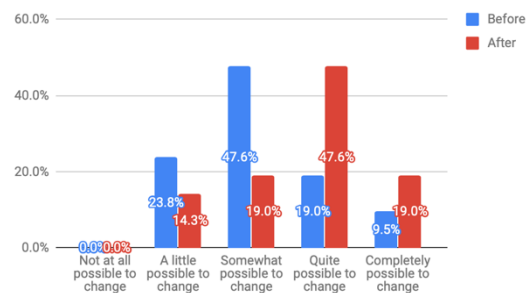
Set 1



Set 2



Set 3



GM5 – In school, how possible is it for you to change: Behaving well in class?

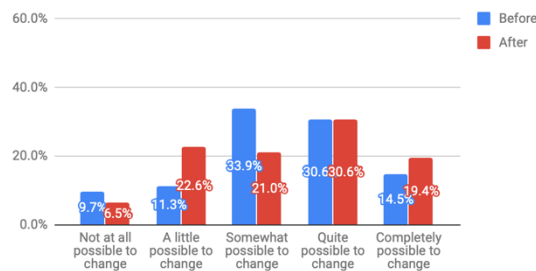
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 6      | 4     | 9.7%   | 6.5%  |
| A little possible   | 7      | 14    | 11.3%  | 22.6% |
| Somewhat possible   | 21     | 13    | 33.9%  | 21.0% |
| Quite possible      | 19     | 19    | 30.6%  | 30.6% |
| Completely possible | 9      | 12    | 14.5%  | 19.4% |
| Positive            |        | 45.2% | 4.8%   | 50.0% |
| Negative            |        | 21.0% | 8.1%   | 29.0% |
| Neutral             |        | 33.9% | -12.9% | 21.0% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 3      | 2     | 15.0%  | 10.0% |
| A little possible   | 1      | 3     | 5.0%   | 15.0% |
| Somewhat possible   | 3      | 3     | 15.0%  | 15.0% |
| Quite possible      | 10     | 6     | 50.0%  | 30.0% |
| Completely possible | 3      | 6     | 15.0%  | 30.0% |
| Positive            |        | 65.0% | -5.0%  | 60.0% |
| Negative            |        | 20.0% | 5.0%   | 25.0% |
| Neutral             |        | 15.0% | 0.0%   | 15.0% |

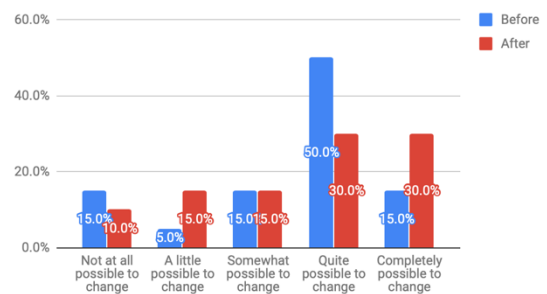
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 2      | 0     | 9.5%   | 0.0%  |
| A little possible   | 5      | 5     | 23.8%  | 23.8% |
| Somewhat possible   | 6      | 4     | 28.6%  | 19.0% |
| Quite possible      | 4      | 8     | 19.0%  | 38.1% |
| Completely possible | 4      | 4     | 19.0%  | 19.0% |
| Positive            |        | 38.1% | 19.0%  | 57.1% |
| Negative            |        | 33.3% | -9.5%  | 23.8% |
| Neutral             |        | 28.6% | -9.5%  | 19.0% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 2     | 4.8%   | 9.5%  |
| A little possible   | 1      | 6     | 4.8%   | 28.6% |
| Somewhat possible   | 12     | 6     | 57.1%  | 28.6% |
| Quite possible      | 5      | 5     | 23.8%  | 23.8% |
| Completely possible | 2      | 2     | 9.5%   | 9.5%  |
| Positive            |        | 33.3% | 0.0%   | 33.3% |
| Negative            |        | 9.5%  | 28.6%  | 38.1% |
| Neutral             |        | 57.1% | -28.6% | 28.6% |

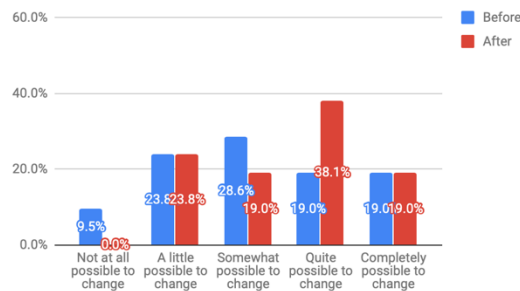
GM5 In school, how possible is it for you to Behaving well in class



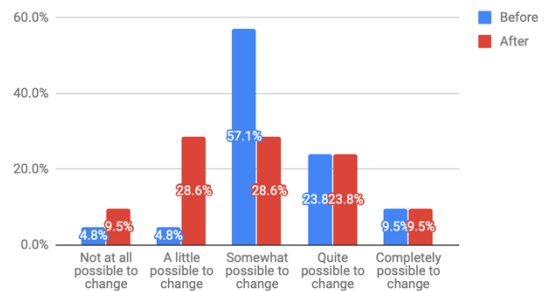
Set 1



Set 2



Set 3



## GM6 – In school, how possible is it for you to change: How easily you give up?

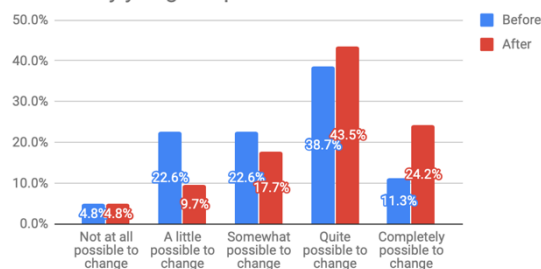
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 3      | 3     | 4.8%   | 4.8%  |
| A little possible   | 14     | 6     | 22.6%  | 9.7%  |
| Somewhat possible   | 14     | 11    | 22.6%  | 17.7% |
| Quite possible      | 24     | 27    | 38.7%  | 43.5% |
| Completely possible | 7      | 15    | 11.3%  | 24.2% |
| Positive            |        | 50.0% | 17.7%  | 67.7% |
| Negative            |        | 27.4% | -12.9% | 14.5% |
| Neutral             |        | 22.6% | -4.8%  | 17.7% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 0     | 5.0%   | 0.0%  |
| A little possible   | 4      | 0     | 20.0%  | 0.0%  |
| Somewhat possible   | 2      | 5     | 10.0%  | 25.0% |
| Quite possible      | 9      | 10    | 45.0%  | 50.0% |
| Completely possible | 4      | 5     | 20.0%  | 25.0% |
| Positive            |        | 65.0% | 10.0%  | 75.0% |
| Negative            |        | 25.0% | -25.0% | 0.0%  |
| Neutral             |        | 10.0% | 15.0%  | 25.0% |

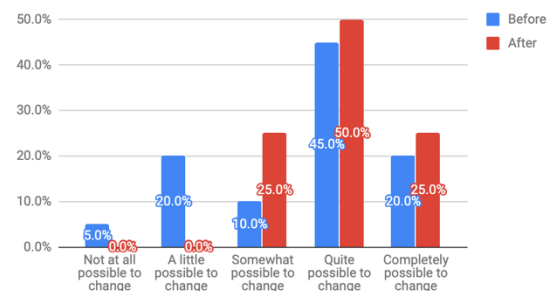
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 1     | 4.8%   | 4.8%  |
| A little possible   | 4      | 3     | 19.0%  | 14.3% |
| Somewhat possible   | 6      | 3     | 28.6%  | 14.3% |
| Quite possible      | 8      | 8     | 38.1%  | 38.1% |
| Completely possible | 2      | 6     | 9.5%   | 28.6% |
| Positive            |        | 47.6% | 19.0%  | 66.7% |
| Negative            |        | 23.8% | -4.8%  | 19.0% |
| Neutral             |        | 28.6% | -14.3% | 14.3% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all possible | 1      | 2     | 4.8%   | 9.5%  |
| A little possible   | 6      | 3     | 28.6%  | 14.3% |
| Somewhat possible   | 6      | 3     | 28.6%  | 14.3% |
| Quite possible      | 7      | 9     | 33.3%  | 42.9% |
| Completely possible | 1      | 4     | 4.8%   | 19.0% |
| Positive            |        | 38.1% | 23.8%  | 61.9% |
| Negative            |        | 33.3% | -9.5%  | 23.8% |
| Neutral             |        | 28.6% | -14.3% | 14.3% |

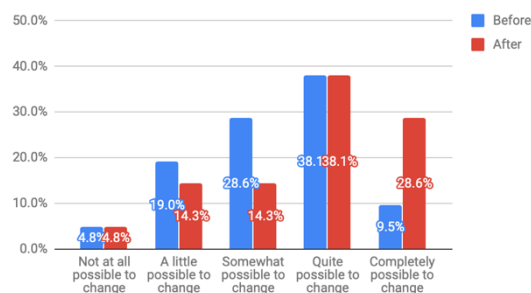
GM6 In school, how possible is it for you to change: How easily you give up



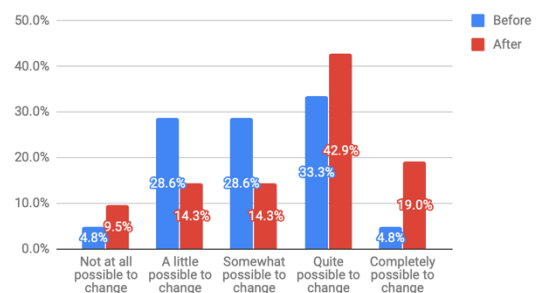
Set 1



Set 2



Set 3



## Appendix H – Pupil Panorama Survey Responses for Grit

G1 – How often do you stay focused on the same goal for several months at a time?

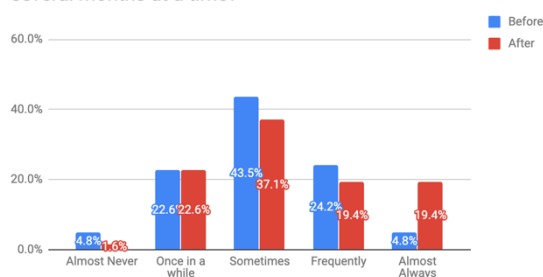
| All             |        |        |       |       |
|-----------------|--------|--------|-------|-------|
|                 | Before | Before | After | After |
| Almost Never    | 3      | 4.8%   | 1     | 1.6%  |
| Once in a while | 14     | 22.6%  | 14    | 22.6% |
| Sometimes       | 27     | 43.5%  | 23    | 37.1% |
| Frequently      | 15     | 24.2%  | 12    | 19.4% |
| Almost Always   | 3      | 4.8%   | 12    | 19.4% |
| Positive        |        | 29.0%  | 9.7%  | 38.7% |
| Negative        |        | 27.4%  | -3.2% | 24.2% |
| Neutral         |        | 43.5%  | -6.5% | 37.1% |

| Set 1           |        |        |       |       |
|-----------------|--------|--------|-------|-------|
|                 | Before | Before | After | After |
| Almost Never    | 1      | 5.0%   | 0     | 0.0%  |
| Once in a while | 5      | 25.0%  | 5     | 25.0% |
| Sometimes       | 6      | 30.0%  | 6     | 30.0% |
| Frequently      | 6      | 30.0%  | 4     | 20.0% |
| Almost Always   | 2      | 10.0%  | 5     | 25.0% |
| Positive        |        | 40.0%  | 5.0%  | 45.0% |
| Negative        |        | 30.0%  | -5.0% | 25.0% |
| Neutral         |        | 30.0%  | 0.0%  | 30.0% |

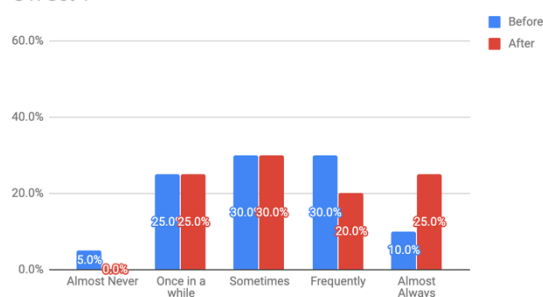
| Set 2           |        |        |        |       |
|-----------------|--------|--------|--------|-------|
|                 | Before | Before | After  | After |
| Almost Never    | 2      | 9.5%   | 1      | 4.8%  |
| Once in a while | 3      | 14.3%  | 5      | 23.8% |
| Sometimes       | 13     | 61.9%  | 7      | 33.3% |
| Frequently      | 3      | 14.3%  | 3      | 14.3% |
| Almost Always   | 0      | 0.0%   | 5      | 23.8% |
| Positive        |        | 14.3%  | 23.8%  | 38.1% |
| Negative        |        | 23.8%  | 4.8%   | 28.6% |
| Neutral         |        | 61.9%  | -28.6% | 33.3% |

| Set 3           |        |        |       |       |
|-----------------|--------|--------|-------|-------|
|                 | Before | Before | After | After |
| Almost Never    | 0      | 0.0%   | 0     | 0.0%  |
| Once in a while | 6      | 28.6%  | 4     | 19.0% |
| Sometimes       | 8      | 38.1%  | 10    | 47.6% |
| Frequently      | 6      | 28.6%  | 5     | 23.8% |
| Almost Always   | 1      | 4.8%   | 2     | 9.5%  |
| Positive        |        | 33.3%  | 0.0%  | 33.3% |
| Negative        |        | 28.6%  | -9.5% | 19.0% |
| Neutral         |        | 38.1%  | 9.5%  | 47.6% |

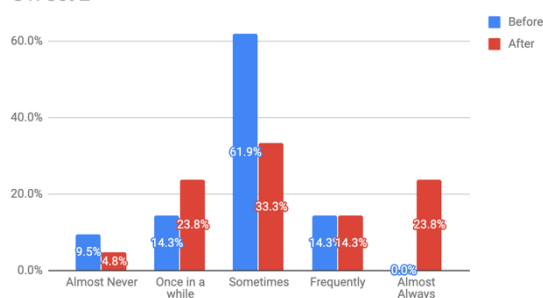
G1 How often do you stay focused on the same goal for several months at a time?



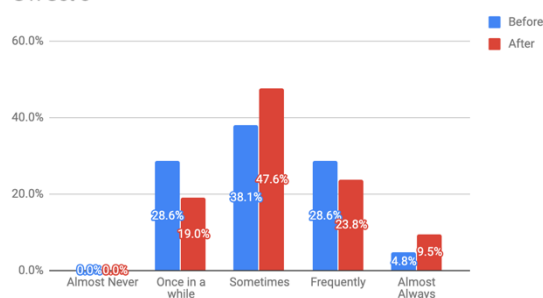
G1: Set 1



G1: Set 2



G1: Set 3



## G2 – If you fail to reach an important goal, how likely are you to try again?

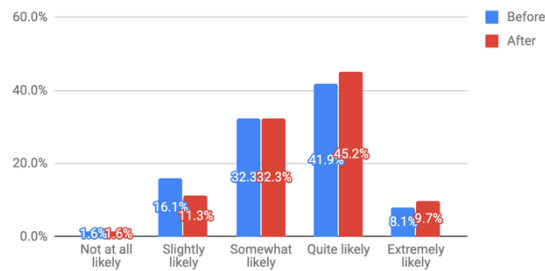
| All               |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 1      | 1     | 1.6%   | 1.6%  |
| Slightly likely   | 10     | 7     | 16.1%  | 11.3% |
| Somewhat likely   | 20     | 20    | 32.3%  | 32.3% |
| Quite likely      | 26     | 28    | 41.9%  | 45.2% |
| Extremely likely  | 5      | 6     | 8.1%   | 9.7%  |
| Positive          |        | 50.0% | 4.8%   | 54.8% |
| Negative          |        | 17.7% | -4.8%  | 12.9% |
| Neutral           |        | 32.3% | 0.0%   | 32.3% |

| Set 1             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 0      | 0     | 0.0%   | 0.0%  |
| Slightly likely   | 2      | 1     | 10.0%  | 5.0%  |
| Somewhat likely   | 8      | 5     | 40.0%  | 25.0% |
| Quite likely      | 8      | 12    | 40.0%  | 60.0% |
| Extremely likely  | 2      | 2     | 10.0%  | 10.0% |
| Positive          |        | 50.0% | 20.0%  | 70.0% |
| Negative          |        | 10.0% | -5.0%  | 5.0%  |
| Neutral           |        | 40.0% | -15.0% | 25.0% |

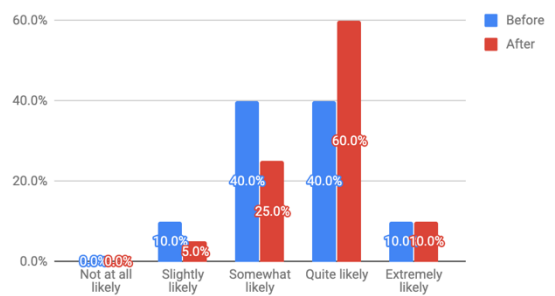
| Set 2             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 1      | 1     | 4.8%   | 4.8%  |
| Slightly likely   | 3      | 3     | 14.3%  | 14.3% |
| Somewhat likely   | 6      | 7     | 28.6%  | 33.3% |
| Quite likely      | 11     | 8     | 52.4%  | 38.1% |
| Extremely likely  | 0      | 2     | 0.0%   | 9.5%  |
| Positive          |        | 52.4% | -4.8%  | 47.6% |
| Negative          |        | 19.0% | 0.0%   | 19.0% |
| Neutral           |        | 28.6% | 4.8%   | 33.3% |

| Set 3             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 0      | 0     | 0.0%   | 0.0%  |
| Slightly likely   | 5      | 3     | 23.8%  | 14.3% |
| Somewhat likely   | 6      | 8     | 28.6%  | 38.1% |
| Quite likely      | 7      | 8     | 33.3%  | 38.1% |
| Extremely likely  | 3      | 2     | 14.3%  | 9.5%  |
| Positive          |        | 47.6% | 0.0%   | 47.6% |
| Negative          |        | 23.8% | -9.5%  | 14.3% |
| Neutral           |        | 28.6% | 9.5%   | 38.1% |

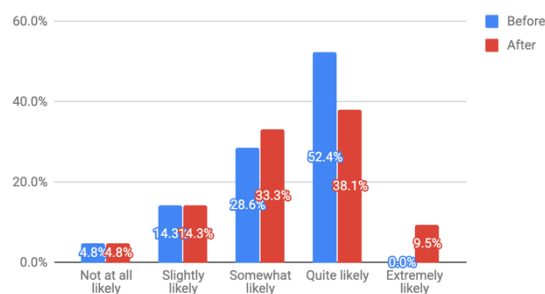
G2 If you fail to reach an important goal, how likely are you to try again?



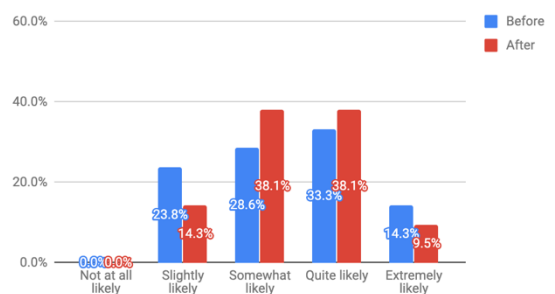
Set 1



Set 2



Set 3



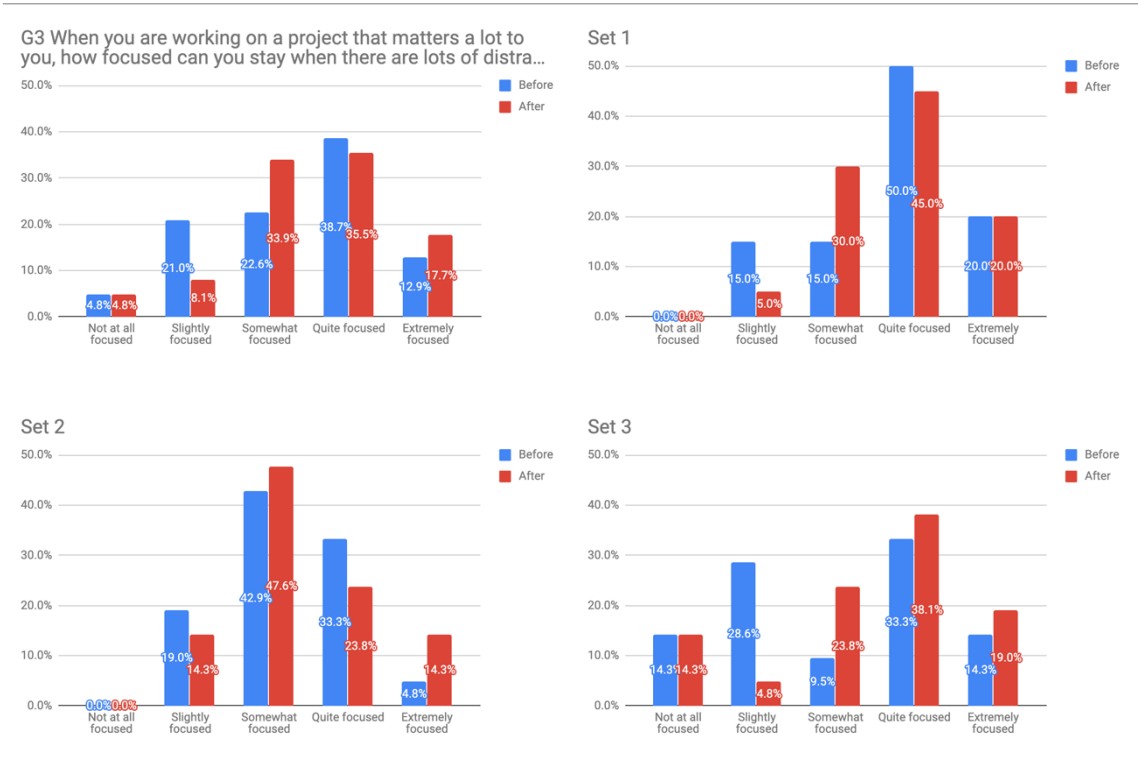
G3 – When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?

| All                |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not at all focused | 3      | 3     | 4.8%   | 4.8%  |
| Slightly focused   | 13     | 5     | 21.0%  | 8.1%  |
| Somewhat focused   | 14     | 21    | 22.6%  | 33.9% |
| Quite focused      | 24     | 22    | 38.7%  | 35.5% |
| Extremely focused  | 8      | 11    | 12.9%  | 17.7% |
| Positive           |        | 51.6% | 1.6%   | 53.2% |
| Negative           |        | 25.8% | -12.9% | 12.9% |
| Neutral            |        | 22.6% | 11.3%  | 33.9% |

| Set 1              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not at all focused | 0      | 0     | 0.0%   | 0.0%  |
| Slightly focused   | 3      | 1     | 15.0%  | 5.0%  |
| Somewhat focused   | 3      | 6     | 15.0%  | 30.0% |
| Quite focused      | 10     | 9     | 50.0%  | 45.0% |
| Extremely focused  | 4      | 4     | 20.0%  | 20.0% |
| Positive           |        | 70.0% | -5.0%  | 65.0% |
| Negative           |        | 15.0% | -10.0% | 5.0%  |
| Neutral            |        | 15.0% | 15.0%  | 30.0% |

| Set 2              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not at all focused | 0      | 0     | 0.0%   | 0.0%  |
| Slightly focused   | 4      | 3     | 19.0%  | 14.3% |
| Somewhat focused   | 9      | 10    | 42.9%  | 47.6% |
| Quite focused      | 7      | 5     | 33.3%  | 23.8% |
| Extremely focused  | 1      | 3     | 4.8%   | 14.3% |
| Positive           |        | 38.1% | 0.0%   | 38.1% |
| Negative           |        | 19.0% | -4.8%  | 14.3% |
| Neutral            |        | 42.9% | 4.8%   | 47.6% |

| Set 3              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not at all focused | 3      | 3     | 14.3%  | 14.3% |
| Slightly focused   | 6      | 1     | 28.6%  | 4.8%  |
| Somewhat focused   | 2      | 5     | 9.5%   | 23.8% |
| Quite focused      | 7      | 8     | 33.3%  | 38.1% |
| Extremely focused  | 3      | 4     | 14.3%  | 19.0% |
| Positive           |        | 47.6% | 9.5%   | 57.1% |
| Negative           |        | 42.9% | -23.8% | 19.0% |
| Neutral            |        | 9.5%  | 14.3%  | 23.8% |



G4 – If you have a problem while working towards an important goal, how well can you keep working?

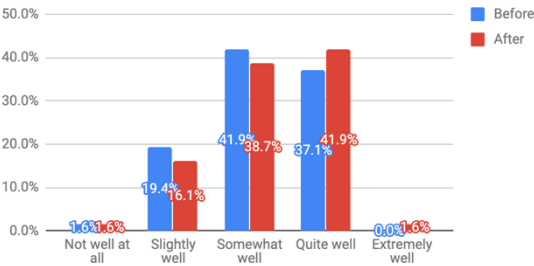
| All             |        |       |        |       |
|-----------------|--------|-------|--------|-------|
|                 | Before | After | Before | After |
| Not well at all | 1      | 1     | 1.6%   | 1.6%  |
| Slightly well   | 12     | 10    | 19.4%  | 16.1% |
| Somewhat well   | 26     | 24    | 41.9%  | 38.7% |
| Quite well      | 23     | 26    | 37.1%  | 41.9% |
| Extremely well  | 0      | 1     | 0.0%   | 1.6%  |
| Positive        |        | 37.1% | 6.5%   | 43.5% |
| Negative        |        | 21.0% | -3.2%  | 17.7% |
| Neutral         |        | 41.9% | -3.2%  | 38.7% |

| Set 1           |        |       |        |       |
|-----------------|--------|-------|--------|-------|
|                 | Before | After | Before | After |
| Not well at all | 0      | 1     | 0.0%   | 5.0%  |
| Slightly well   | 3      | 1     | 15.0%  | 5.0%  |
| Somewhat well   | 9      | 10    | 45.0%  | 50.0% |
| Quite well      | 8      | 8     | 40.0%  | 40.0% |
| Extremely well  | 0      | 0     | 0.0%   | 0.0%  |
| Positive        |        | 40.0% | 0.0%   | 40.0% |
| Negative        |        | 15.0% | -5.0%  | 10.0% |
| Neutral         |        | 45.0% | 5.0%   | 50.0% |

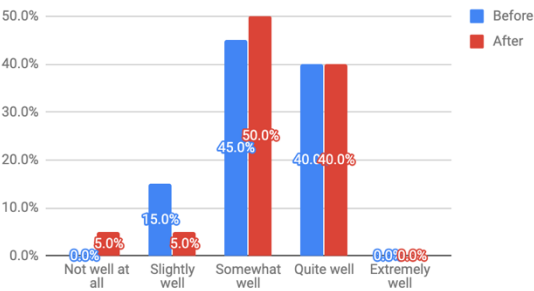
| Set 2           |        |       |        |       |
|-----------------|--------|-------|--------|-------|
|                 | Before | After | Before | After |
| Not well at all | 1      | 0     | 4.8%   | 0.0%  |
| Slightly well   | 3      | 4     | 14.3%  | 19.0% |
| Somewhat well   | 7      | 8     | 33.3%  | 38.1% |
| Quite well      | 10     | 8     | 47.6%  | 38.1% |
| Extremely well  | 0      | 1     | 0.0%   | 4.8%  |
| Positive        |        | 47.6% | -4.8%  | 42.9% |
| Negative        |        | 19.0% | 0.0%   | 19.0% |
| Neutral         |        | 33.3% | 4.8%   | 38.1% |

| Set 3           |        |       |        |       |
|-----------------|--------|-------|--------|-------|
|                 | Before | After | Before | After |
| Not well at all | 0      | 0     | 0.0%   | 0.0%  |
| Slightly well   | 6      | 5     | 28.6%  | 23.8% |
| Somewhat well   | 10     | 6     | 47.6%  | 28.6% |
| Quite well      | 5      | 10    | 23.8%  | 47.6% |
| Extremely well  | 0      | 0     | 0.0%   | 0.0%  |
| Positive        |        | 23.8% | 23.8%  | 47.6% |
| Negative        |        | 28.6% | -4.8%  | 23.8% |
| Neutral         |        | 47.6% | -19.0% | 28.6% |

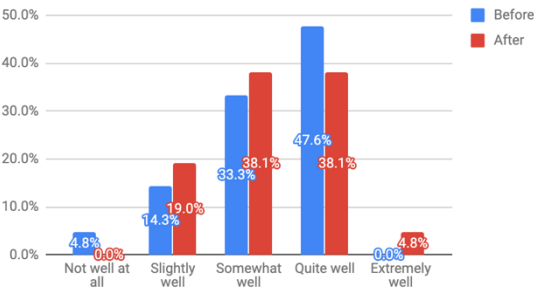
G4 If you have a problem while working towards an important goal, how well can you keep working?



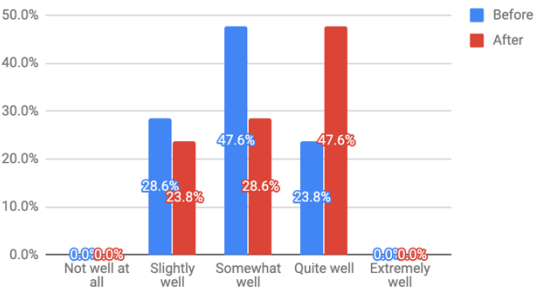
Set 1



Set 2



Set 3



G5 – Some people pursue some of their goals for a long time, and other change their goal frequently. Over the next several years, how likely are you to continue to pursue on of your current goals?

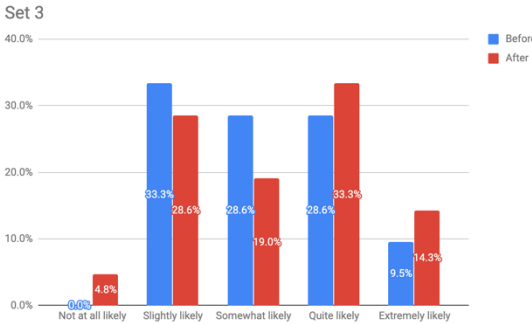
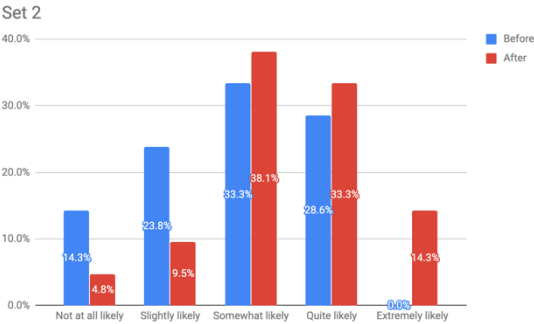
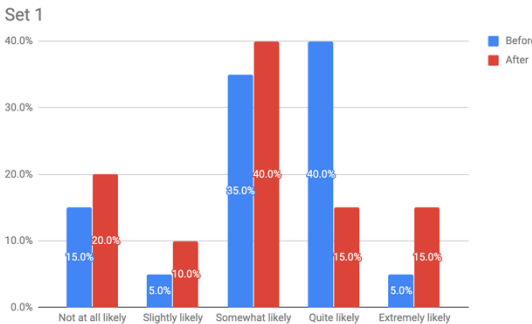
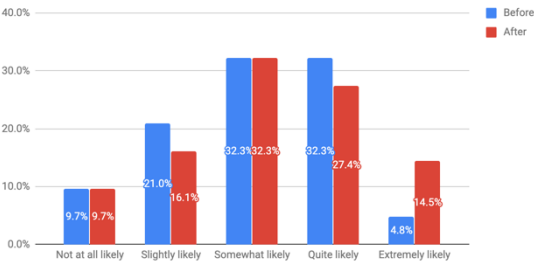
| All               |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 6      | 6     | 9.7%   | 9.7%  |
| Slightly likely   | 13     | 10    | 21.0%  | 16.1% |
| Somewhat likely   | 20     | 20    | 32.3%  | 32.3% |
| Quite likely      | 20     | 17    | 32.3%  | 27.4% |
| Extremely likely  | 3      | 9     | 4.8%   | 14.5% |
| Positive          |        | 37.1% | 4.8%   | 41.9% |
| Negative          |        | 30.6% | -4.8%  | 25.8% |
| Neutral           |        | 32.3% | 0.0%   | 32.3% |

| Set 1             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 3      | 4     | 15.0%  | 20.0% |
| Slightly likely   | 1      | 2     | 5.0%   | 10.0% |
| Somewhat likely   | 7      | 8     | 35.0%  | 40.0% |
| Quite likely      | 8      | 3     | 40.0%  | 15.0% |
| Extremely likely  | 1      | 3     | 5.0%   | 15.0% |
| Positive          |        | 45.0% | -15.0% | 30.0% |
| Negative          |        | 20.0% | 10.0%  | 30.0% |
| Neutral           |        | 35.0% | 5.0%   | 40.0% |

| Set 2             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 3      | 1     | 14.3%  | 4.8%  |
| Slightly likely   | 5      | 2     | 23.8%  | 9.5%  |
| Somewhat likely   | 7      | 8     | 33.3%  | 38.1% |
| Quite likely      | 6      | 7     | 28.6%  | 33.3% |
| Extremely likely  | 0      | 3     | 0.0%   | 14.3% |
| Positive          |        | 28.6% | 19.0%  | 47.6% |
| Negative          |        | 38.1% | -23.8% | 14.3% |
| Neutral           |        | 33.3% | 4.8%   | 38.1% |

| Set 3             |        |       |        |       |
|-------------------|--------|-------|--------|-------|
|                   | Before | After | Before | After |
| Not at all likely | 0      | 1     | 0.0%   | 4.8%  |
| Slightly likely   | 7      | 6     | 33.3%  | 28.6% |
| Somewhat likely   | 6      | 4     | 28.6%  | 19.0% |
| Quite likely      | 6      | 7     | 28.6%  | 33.3% |
| Extremely likely  | 2      | 3     | 9.5%   | 14.3% |
| Positive          |        | 38.1% | 9.5%   | 47.6% |
| Negative          |        | 33.3% | 0.0%   | 33.3% |
| Neutral           |        | 28.6% | -9.5%  | 19.0% |

G5 Some people pursue some of their goals for a long time, and others change their goals frequently. Over the next several years, how likely are you to continue to pursue one of your current goals?



## Appendix I – Pupil Panorama Survey Responses for Social Awareness

SA1 – During the past 30 days... How carefully did you listen to other peoples' points of view?

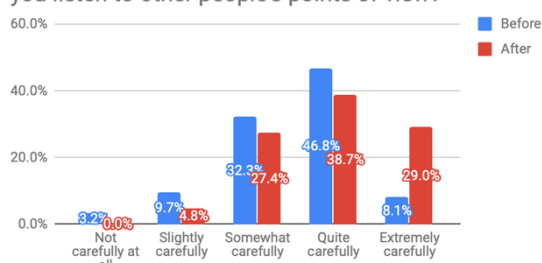
| All                  |        |       |        |       |
|----------------------|--------|-------|--------|-------|
|                      | Before | After | Before | After |
| Not carefully at all | 2      | 0     | 3.2%   | 0.0%  |
| Slightly carefully   | 6      | 3     | 9.7%   | 4.8%  |
| Somewhat carefully   | 20     | 17    | 32.3%  | 27.4% |
| Quite carefully      | 29     | 24    | 46.8%  | 38.7% |
| Extremely carefully  | 5      | 18    | 8.1%   | 29.0% |
| Positive             |        | 54.8% | 12.9%  | 67.7% |
| Negative             |        | 12.9% | -8.1%  | 4.8%  |
| Neutral              |        | 32.3% | -4.8%  | 27.4% |

| Set 1                |        |       |        |       |
|----------------------|--------|-------|--------|-------|
|                      | Before | After | Before | After |
| Not carefully at all | 0      | 0     | 0.0%   | 0.0%  |
| Slightly carefully   | 1      | 0     | 5.0%   | 0.0%  |
| Somewhat carefully   | 5      | 3     | 25.0%  | 15.0% |
| Quite carefully      | 12     | 11    | 60.0%  | 55.0% |
| Extremely carefully  | 2      | 6     | 10.0%  | 30.0% |
| Positive             |        | 70.0% | 15.0%  | 85.0% |
| Negative             |        | 5.0%  | -5.0%  | 0.0%  |
| Neutral              |        | 25.0% | -10.0% | 15.0% |

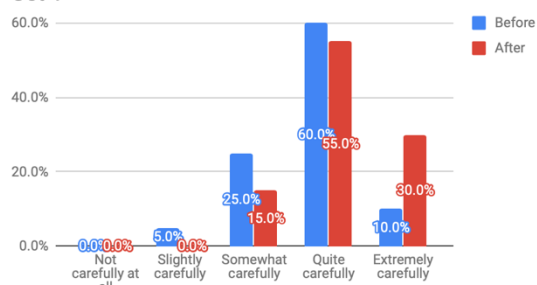
| Set 2                |        |       |        |       |
|----------------------|--------|-------|--------|-------|
|                      | Before | After | Before | After |
| Not carefully at all | 2      | 0     | 9.5%   | 0.0%  |
| Slightly carefully   | 2      | 2     | 9.5%   | 9.5%  |
| Somewhat carefully   | 7      | 6     | 33.3%  | 28.6% |
| Quite carefully      | 10     | 8     | 47.6%  | 38.1% |
| Extremely carefully  | 0      | 5     | 0.0%   | 23.8% |
| Positive             |        | 47.6% | 14.3%  | 61.9% |
| Negative             |        | 19.0% | -9.5%  | 9.5%  |
| Neutral              |        | 33.3% | -4.8%  | 28.6% |

| Set 3                |        |       |        |       |
|----------------------|--------|-------|--------|-------|
|                      | Before | After | Before | After |
| Not carefully at all | 0      | 0     | 0.0%   | 0.0%  |
| Slightly carefully   | 3      | 1     | 14.3%  | 4.8%  |
| Somewhat carefully   | 8      | 8     | 38.1%  | 38.1% |
| Quite carefully      | 7      | 5     | 33.3%  | 23.8% |
| Extremely carefully  | 3      | 7     | 14.3%  | 33.3% |
| Positive             |        | 47.6% | 9.5%   | 57.1% |
| Negative             |        | 14.3% | -9.5%  | 4.8%  |
| Neutral              |        | 38.1% | 0.0%   | 38.1% |

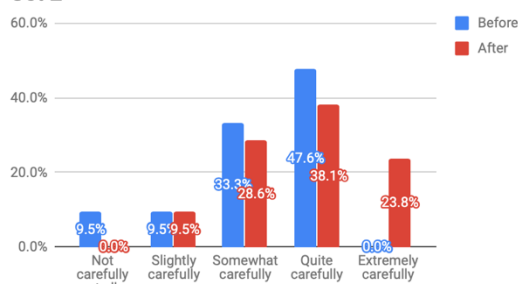
SA1 During the past 30 days... How carefully did you listen to other people's points of view?



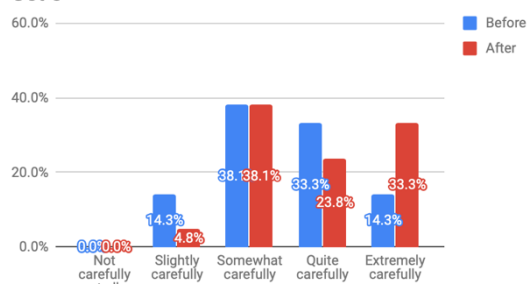
Set 1



Set 2



Set 3



## SA2 – How much did you care about other people’s feelings?

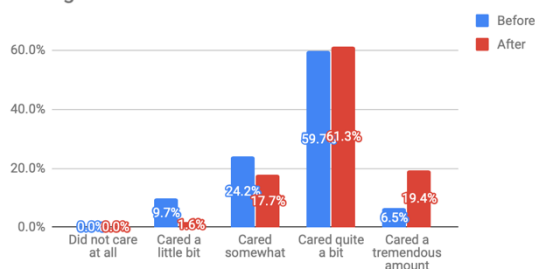
| All                       |        |       |        |       |
|---------------------------|--------|-------|--------|-------|
|                           | Before | After | Before | After |
| Did not care at all       | 0      | 0     | 0.0%   | 0.0%  |
| Cared a little bit        | 6      | 1     | 9.7%   | 1.6%  |
| Cared somewhat            | 15     | 11    | 24.2%  | 17.7% |
| Cared quite a bit         | 37     | 38    | 59.7%  | 61.3% |
| Cared a tremendous amount | 4      | 12    | 6.5%   | 19.4% |
| Positive                  |        | 66.1% | 14.5%  | 80.6% |
| Negative                  |        | 9.7%  | -8.1%  | 1.6%  |
| Neutral                   |        | 24.2% | -6.5%  | 17.7% |

| Set 1                     |        |       |        |       |
|---------------------------|--------|-------|--------|-------|
|                           | Before | After | Before | After |
| Did not care at all       | 0      | 0     | 0.0%   | 0.0%  |
| Cared a little bit        | 1      | 0     | 5.0%   | 0.0%  |
| Cared somewhat            | 3      | 2     | 15.0%  | 10.0% |
| Cared quite a bit         | 14     | 12    | 70.0%  | 60.0% |
| Cared a tremendous amount | 2      | 6     | 10.0%  | 30.0% |
| Positive                  |        | 80.0% | 10.0%  | 90.0% |
| Negative                  |        | 5.0%  | -5.0%  | 0.0%  |
| Neutral                   |        | 15.0% | -5.0%  | 10.0% |

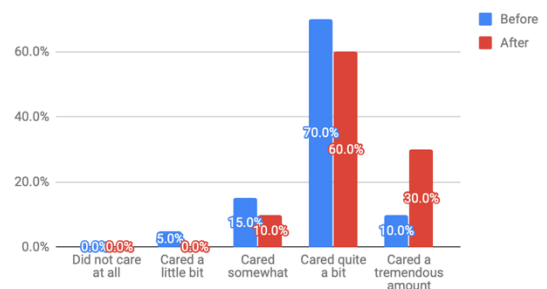
| Set 2                     |        |       |        |       |
|---------------------------|--------|-------|--------|-------|
|                           | Before | After | Before | After |
| Did not care at all       | 0      | 0     | 0.0%   | 0.0%  |
| Cared a little bit        | 4      | 1     | 19.0%  | 4.8%  |
| Cared somewhat            | 5      | 4     | 23.8%  | 19.0% |
| Cared quite a bit         | 12     | 14    | 57.1%  | 66.7% |
| Cared a tremendous amount | 0      | 2     | 0.0%   | 9.5%  |
| Positive                  |        | 57.1% | 19.0%  | 76.2% |
| Negative                  |        | 19.0% | -14.3% | 4.8%  |
| Neutral                   |        | 23.8% | -4.8%  | 19.0% |

| Set 3                     |        |       |        |       |
|---------------------------|--------|-------|--------|-------|
|                           | Before | After | Before | After |
| Did not care at all       | 0      | 0     | 0.0%   | 0.0%  |
| Cared a little bit        | 1      | 0     | 4.8%   | 0.0%  |
| Cared somewhat            | 7      | 5     | 33.3%  | 23.8% |
| Cared quite a bit         | 11     | 12    | 52.4%  | 57.1% |
| Cared a tremendous amount | 2      | 4     | 9.5%   | 19.0% |
| Positive                  |        | 61.9% | 14.3%  | 76.2% |
| Negative                  |        | 4.8%  | -4.8%  | 0.0%  |
| Neutral                   |        | 33.3% | -9.5%  | 23.8% |

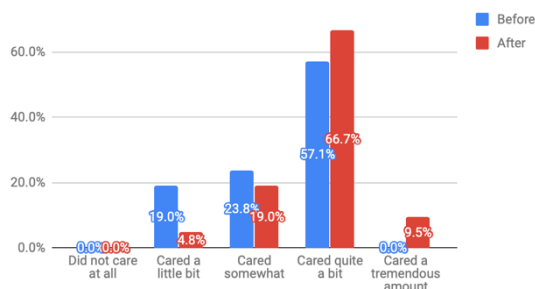
SA2 How much did you care about other people's feelings?



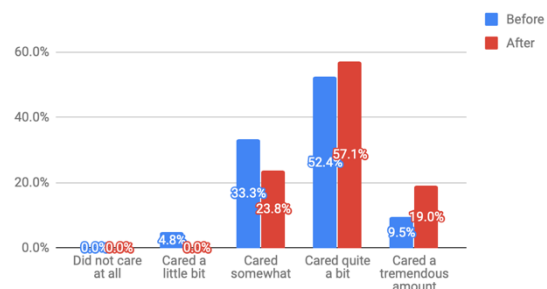
Set 1



Set 2



Set 3



### SA3 – How often did you compliment others' accomplishments?

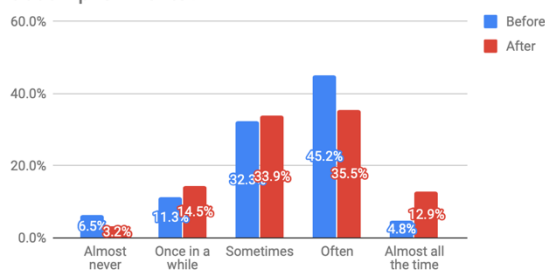
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 4      | 2     | 6.5%   | 3.2%  |
| Once in a while     | 7      | 9     | 11.3%  | 14.5% |
| Sometimes           | 20     | 21    | 32.3%  | 33.9% |
| Often               | 28     | 22    | 45.2%  | 35.5% |
| Almost all the time | 3      | 8     | 4.8%   | 12.9% |
| Positive            |        | 50.0% | -1.6%  | 48.4% |
| Negative            |        | 17.7% | 0.0%   | 17.7% |
| Neutral             |        | 32.3% | 1.6%   | 33.9% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 1     | 0.0%   | 5.0%  |
| Once in a while     | 2      | 3     | 10.0%  | 15.0% |
| Sometimes           | 7      | 4     | 35.0%  | 20.0% |
| Often               | 9      | 9     | 45.0%  | 45.0% |
| Almost all the time | 2      | 3     | 10.0%  | 15.0% |
| Positive            |        | 55.0% | 5.0%   | 60.0% |
| Negative            |        | 10.0% | 10.0%  | 20.0% |
| Neutral             |        | 35.0% | -15.0% | 20.0% |

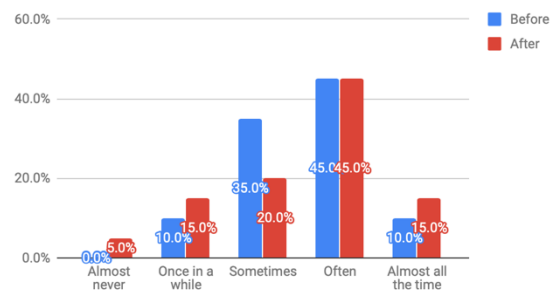
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 1     | 9.5%   | 4.8%  |
| Once in a while     | 3      | 2     | 14.3%  | 9.5%  |
| Sometimes           | 8      | 11    | 38.1%  | 52.4% |
| Often               | 7      | 4     | 33.3%  | 19.0% |
| Almost all the time | 1      | 3     | 4.8%   | 14.3% |
| Positive            |        | 38.1% | -4.8%  | 33.3% |
| Negative            |        | 23.8% | -9.5%  | 14.3% |
| Neutral             |        | 38.1% | 14.3%  | 52.4% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 0     | 9.5%   | 0.0%  |
| Once in a while     | 2      | 4     | 9.5%   | 19.0% |
| Sometimes           | 5      | 6     | 23.8%  | 28.6% |
| Often               | 12     | 9     | 57.1%  | 42.9% |
| Almost all the time | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 57.1% | -4.8%  | 52.4% |
| Negative            |        | 19.0% | 0.0%   | 19.0% |
| Neutral             |        | 23.8% | 4.8%   | 28.6% |

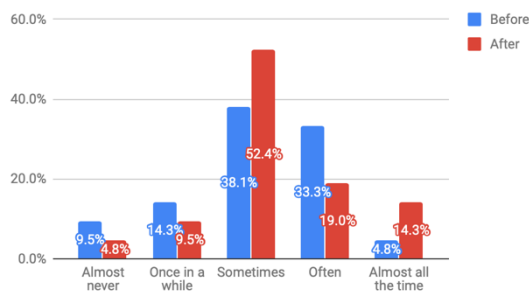
SA3 How often did you compliment others' accomplishments?



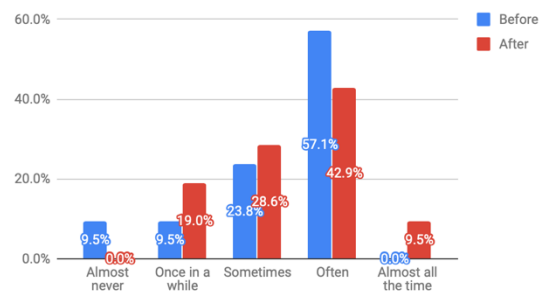
Set 1



Set 2



Set 3



## SA4 – How well did you get along with students who are different from you?

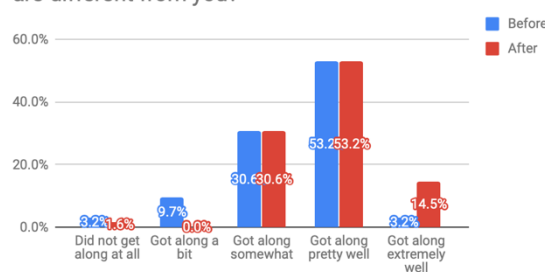
| All                      |        |       |        |       |
|--------------------------|--------|-------|--------|-------|
|                          | Before | After | Before | After |
| Did not get along at all | 2      | 1     | 3.2%   | 1.6%  |
| Got along a bit          | 6      | 0     | 9.7%   | 0.0%  |
| Got along somewhat       | 19     | 19    | 30.6%  | 30.6% |
| Got along pretty well    | 33     | 33    | 53.2%  | 53.2% |
| Got along extremely well | 2      | 9     | 3.2%   | 14.5% |
| Positive                 |        | 56.5% | 11.3%  | 67.7% |
| Negative                 |        | 12.9% | -11.3% | 1.6%  |
| Neutral                  |        | 30.6% | 0.0%   | 30.6% |

| Set 1                    |        |       |        |       |
|--------------------------|--------|-------|--------|-------|
|                          | Before | After | Before | After |
| Did not get along at all | 1      | 0     | 5.0%   | 0.0%  |
| Got along a bit          | 1      | 0     | 5.0%   | 0.0%  |
| Got along somewhat       | 4      | 4     | 20.0%  | 20.0% |
| Got along pretty well    | 13     | 12    | 65.0%  | 60.0% |
| Got along extremely well | 1      | 4     | 5.0%   | 20.0% |
| Positive                 |        | 70.0% | 10.0%  | 80.0% |
| Negative                 |        | 10.0% | -10.0% | 0.0%  |
| Neutral                  |        | 20.0% | 0.0%   | 20.0% |

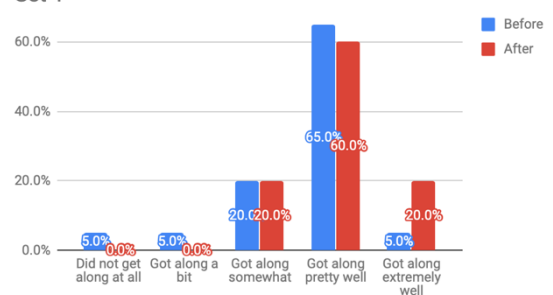
| Set 2                    |        |       |        |       |
|--------------------------|--------|-------|--------|-------|
|                          | Before | After | Before | After |
| Did not get along at all | 1      | 1     | 4.8%   | 4.8%  |
| Got along a bit          | 2      | 0     | 9.5%   | 0.0%  |
| Got along somewhat       | 6      | 7     | 28.6%  | 33.3% |
| Got along pretty well    | 11     | 10    | 52.4%  | 47.6% |
| Got along extremely well | 1      | 3     | 4.8%   | 14.3% |
| Positive                 |        | 57.1% | 4.8%   | 61.9% |
| Negative                 |        | 14.3% | -9.5%  | 4.8%  |
| Neutral                  |        | 28.6% | 4.8%   | 33.3% |

| Set 3                    |        |       |        |       |
|--------------------------|--------|-------|--------|-------|
|                          | Before | After | Before | After |
| Did not get along at all | 0      | 0     | 0.0%   | 0.0%  |
| Got along a bit          | 3      | 0     | 14.3%  | 0.0%  |
| Got along somewhat       | 9      | 8     | 42.9%  | 38.1% |
| Got along pretty well    | 9      | 11    | 42.9%  | 52.4% |
| Got along extremely well | 0      | 2     | 0.0%   | 9.5%  |
| Positive                 |        | 42.9% | 19.0%  | 61.9% |
| Negative                 |        | 14.3% | -14.3% | 0.0%  |
| Neutral                  |        | 42.9% | -4.8%  | 38.1% |

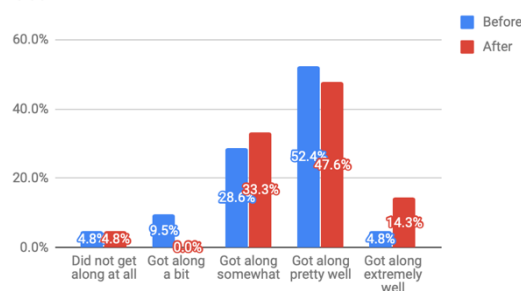
SA4 How well did you get along with students who are different from you?



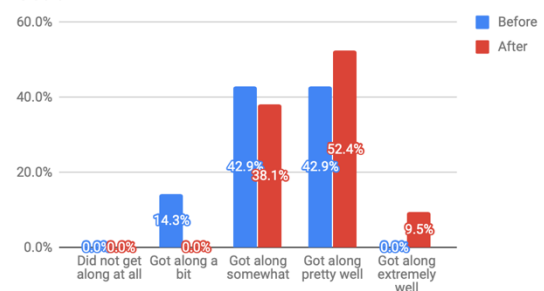
Set 1



Set 2



Set 3



## SA5 – How clearly were you able to describe your feelings?

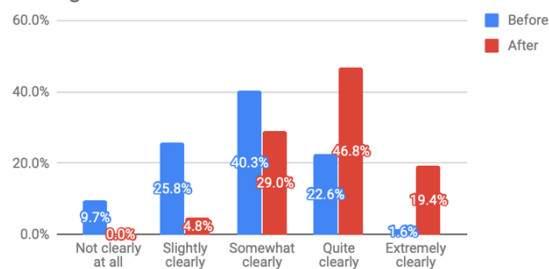
| All                |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not clearly at all | 6      | 0     | 9.7%   | 0.0%  |
| Slightly clearly   | 16     | 3     | 25.8%  | 4.8%  |
| Somewhat clearly   | 25     | 18    | 40.3%  | 29.0% |
| Quite clearly      | 14     | 29    | 22.6%  | 46.8% |
| Extremely clearly  | 1      | 12    | 1.6%   | 19.4% |
| Positive           |        | 24.2% | 41.9%  | 66.1% |
| Negative           |        | 35.5% | -30.6% | 4.8%  |
| Neutral            |        | 40.3% | -11.3% | 29.0% |

| Set 1              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not clearly at all | 2      | 0     | 10.0%  | 0.0%  |
| Slightly clearly   | 7      | 0     | 35.0%  | 0.0%  |
| Somewhat clearly   | 10     | 6     | 50.0%  | 30.0% |
| Quite clearly      | 1      | 11    | 5.0%   | 55.0% |
| Extremely clearly  | 0      | 3     | 0.0%   | 15.0% |
| Positive           |        | 5.0%  | 65.0%  | 70.0% |
| Negative           |        | 45.0% | -45.0% | 0.0%  |
| Neutral            |        | 50.0% | -20.0% | 30.0% |

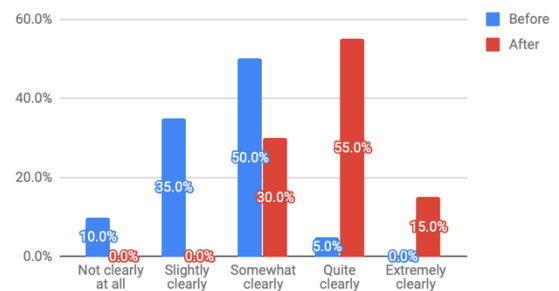
| Set 2              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not clearly at all | 1      | 0     | 4.8%   | 0.0%  |
| Slightly clearly   | 5      | 0     | 23.8%  | 0.0%  |
| Somewhat clearly   | 6      | 8     | 28.6%  | 38.1% |
| Quite clearly      | 8      | 9     | 38.1%  | 42.9% |
| Extremely clearly  | 1      | 4     | 4.8%   | 19.0% |
| Positive           |        | 42.9% | 19.0%  | 61.9% |
| Negative           |        | 28.6% | -28.6% | 0.0%  |
| Neutral            |        | 28.6% | 9.5%   | 38.1% |

| Set 3              |        |       |        |       |
|--------------------|--------|-------|--------|-------|
|                    | Before | After | Before | After |
| Not clearly at all | 3      | 0     | 14.3%  | 0.0%  |
| Slightly clearly   | 4      | 3     | 19.0%  | 14.3% |
| Somewhat clearly   | 9      | 4     | 42.9%  | 19.0% |
| Quite clearly      | 5      | 9     | 23.8%  | 42.9% |
| Extremely clearly  | 0      | 5     | 0.0%   | 23.8% |
| Positive           |        | 23.8% | 42.9%  | 66.7% |
| Negative           |        | 33.3% | -19.0% | 14.3% |
| Neutral            |        | 42.9% | -23.8% | 19.0% |

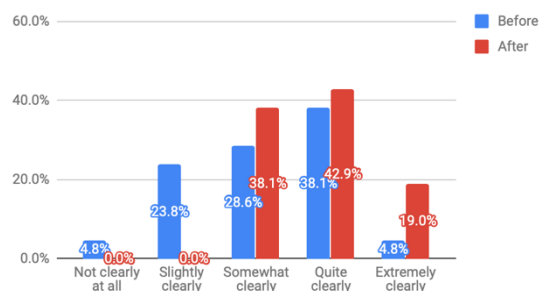
SA5 How clearly were you able to describe your feelings?



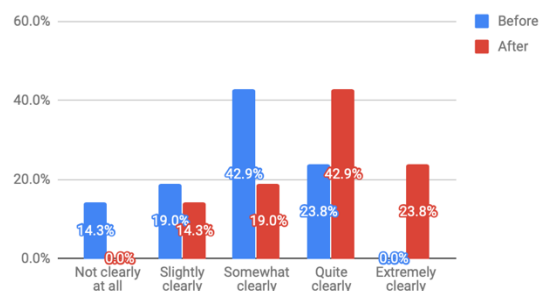
Set 1



Set 2



Set 3



SA6 – When others disagreed with you, how respectful were you of their views?

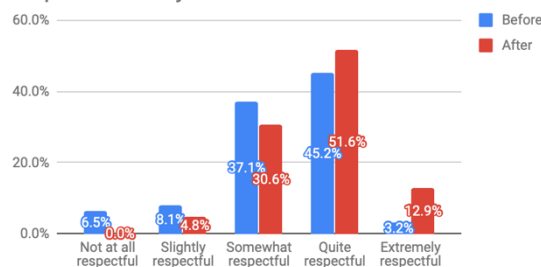
| All                   |        |       |        |       |
|-----------------------|--------|-------|--------|-------|
|                       | Before | After | Before | After |
| Not at all respectful | 4      | 0     | 6.5%   | 0.0%  |
| Slightly respectful   | 5      | 3     | 8.1%   | 4.8%  |
| Somewhat respectful   | 23     | 19    | 37.1%  | 30.6% |
| Quite respectful      | 28     | 32    | 45.2%  | 51.6% |
| Extremely respectful  | 2      | 8     | 3.2%   | 12.9% |
| Positive              |        | 48.4% | 16.1%  | 64.5% |
| Negative              |        | 14.5% | -9.7%  | 4.8%  |
| Neutral               |        | 37.1% | -6.5%  | 30.6% |

| Set 1                 |        |       |        |       |
|-----------------------|--------|-------|--------|-------|
|                       | Before | After | Before | After |
| Not at all respectful | 3      | 0     | 15.0%  | 0.0%  |
| Slightly respectful   | 1      | 1     | 5.0%   | 5.0%  |
| Somewhat respectful   | 5      | 5     | 25.0%  | 25.0% |
| Quite respectful      | 10     | 12    | 50.0%  | 60.0% |
| Extremely respectful  | 1      | 2     | 5.0%   | 10.0% |
| Positive              |        | 55.0% | 15.0%  | 70.0% |
| Negative              |        | 20.0% | -15.0% | 5.0%  |
| Neutral               |        | 25.0% | 0.0%   | 25.0% |

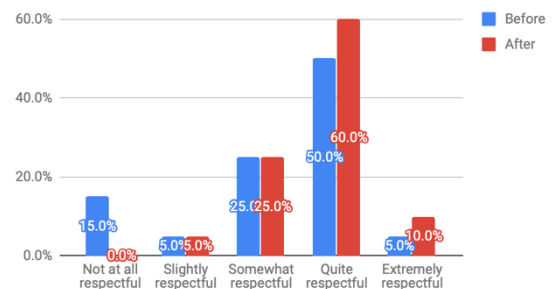
| Set 2                 |        |       |        |       |
|-----------------------|--------|-------|--------|-------|
|                       | Before | After | Before | After |
| Not at all respectful | 1      | 0     | 4.8%   | 0.0%  |
| Slightly respectful   | 3      | 1     | 14.3%  | 4.8%  |
| Somewhat respectful   | 9      | 8     | 42.9%  | 38.1% |
| Quite respectful      | 7      | 9     | 33.3%  | 42.9% |
| Extremely respectful  | 1      | 3     | 4.8%   | 14.3% |
| Positive              |        | 38.1% | 19.0%  | 57.1% |
| Negative              |        | 19.0% | -14.3% | 4.8%  |
| Neutral               |        | 42.9% | -4.8%  | 38.1% |

| Set 3                 |        |       |        |       |
|-----------------------|--------|-------|--------|-------|
|                       | Before | After | Before | After |
| Not at all respectful | 0      | 0     | 0.0%   | 0.0%  |
| Slightly respectful   | 1      | 1     | 4.8%   | 4.8%  |
| Somewhat respectful   | 9      | 6     | 42.9%  | 28.6% |
| Quite respectful      | 11     | 11    | 52.4%  | 52.4% |
| Extremely respectful  | 0      | 3     | 0.0%   | 14.3% |
| Positive              |        | 52.4% | 14.3%  | 66.7% |
| Negative              |        | 4.8%  | 0.0%   | 4.8%  |
| Neutral               |        | 42.9% | -14.3% | 28.6% |

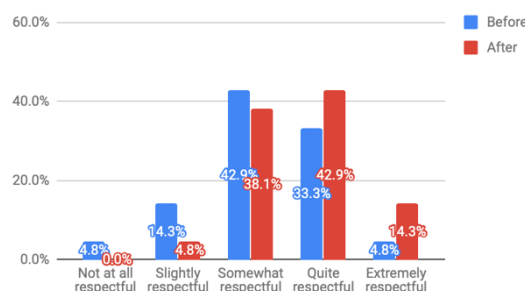
SA6 When others disagreed with you, how respectful were you of their views?



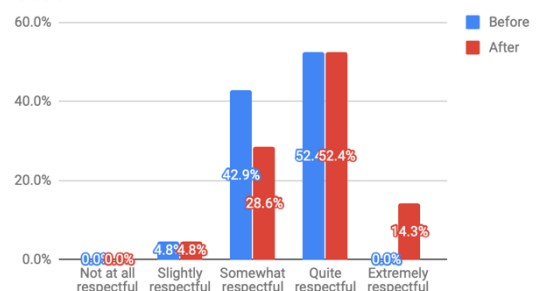
Set 1



Set 2



Set 3



SA7 – To what extent were you able to stand up for yourself without putting others down?

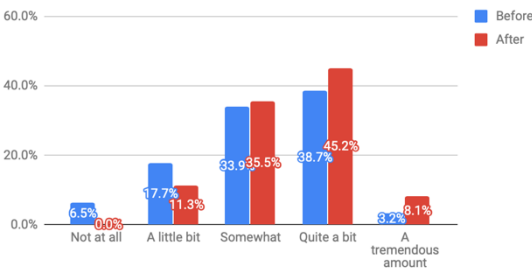
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 4      | 0     | 6.5%   | 0.0%  |
| A little bit        | 11     | 7     | 17.7%  | 11.3% |
| Somewhat            | 21     | 22    | 33.9%  | 35.5% |
| Quite a bit         | 24     | 28    | 38.7%  | 45.2% |
| A tremendous amount | 2      | 5     | 3.2%   | 8.1%  |
| Positive            |        | 41.9% | 11.3%  | 53.2% |
| Negative            |        | 24.2% | -12.9% | 11.3% |
| Neutral             |        | 33.9% | 1.6%   | 35.5% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 1      | 0     | 5.0%   | 0.0%  |
| A little bit        | 2      | 0     | 10.0%  | 0.0%  |
| Somewhat            | 6      | 6     | 30.0%  | 30.0% |
| Quite a bit         | 11     | 10    | 55.0%  | 50.0% |
| A tremendous amount | 0      | 4     | 0.0%   | 20.0% |
| Positive            |        | 55.0% | 15.0%  | 70.0% |
| Negative            |        | 15.0% | -15.0% | 0.0%  |
| Neutral             |        | 30.0% | 0.0%   | 30.0% |

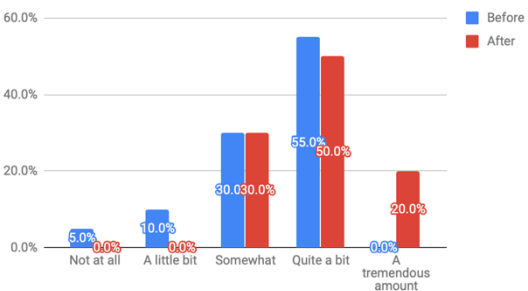
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 2      | 0     | 9.5%   | 0.0%  |
| A little bit        | 3      | 3     | 14.3%  | 14.3% |
| Somewhat            | 5      | 6     | 23.8%  | 28.6% |
| Quite a bit         | 9      | 11    | 42.9%  | 52.4% |
| A tremendous amount | 2      | 1     | 9.5%   | 4.8%  |
| Positive            |        | 52.4% | 4.8%   | 57.1% |
| Negative            |        | 23.8% | -9.5%  | 14.3% |
| Neutral             |        | 23.8% | 4.8%   | 28.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 1      | 0     | 4.8%   | 0.0%  |
| A little bit        | 6      | 4     | 28.6%  | 19.0% |
| Somewhat            | 10     | 10    | 47.6%  | 47.6% |
| Quite a bit         | 4      | 7     | 19.0%  | 33.3% |
| A tremendous amount | 0      | 0     | 0.0%   | 0.0%  |
| Positive            |        | 19.0% | 14.3%  | 33.3% |
| Negative            |        | 33.3% | -14.3% | 19.0% |
| Neutral             |        | 47.6% | 0.0%   | 47.6% |

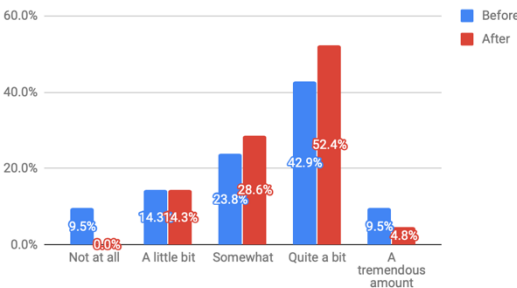
SA7 To what extent were you able to stand up for yourself without putting others down?



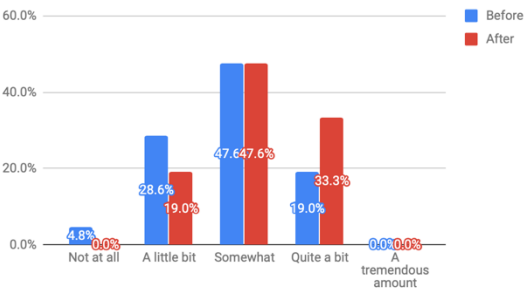
Set 1



Set 2



Set 3



SA8 – To what extent were you able to disagree with others without starting an argument?

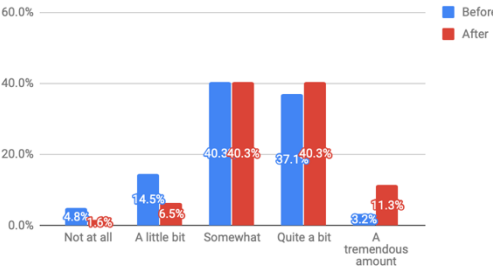
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 3      | 1     | 4.8%   | 1.6%  |
| A little bit        | 9      | 4     | 14.5%  | 6.5%  |
| Somewhat            | 25     | 25    | 40.3%  | 40.3% |
| Quite a bit         | 23     | 25    | 37.1%  | 40.3% |
| A tremendous amount | 2      | 7     | 3.2%   | 11.3% |
| Positive            |        | 40.3% | 11.3%  | 51.6% |
| Negative            |        | 19.4% | -11.3% | 8.1%  |
| Neutral             |        | 40.3% | 0.0%   | 40.3% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 1      | 0     | 5.0%   | 0.0%  |
| A little bit        | 2      | 1     | 10.0%  | 5.0%  |
| Somewhat            | 6      | 6     | 30.0%  | 30.0% |
| Quite a bit         | 11     | 11    | 55.0%  | 55.0% |
| A tremendous amount | 0      | 2     | 0.0%   | 10.0% |
| Positive            |        | 55.0% | 10.0%  | 65.0% |
| Negative            |        | 15.0% | -10.0% | 5.0%  |
| Neutral             |        | 30.0% | 0.0%   | 30.0% |

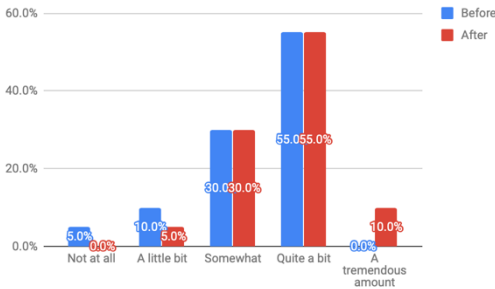
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 2      | 0     | 9.5%   | 0.0%  |
| A little bit        | 3      | 1     | 14.3%  | 4.8%  |
| Somewhat            | 10     | 10    | 47.6%  | 47.6% |
| Quite a bit         | 4      | 7     | 19.0%  | 33.3% |
| A tremendous amount | 2      | 3     | 9.5%   | 14.3% |
| Positive            |        | 28.6% | 19.0%  | 47.6% |
| Negative            |        | 23.8% | -19.0% | 4.8%  |
| Neutral             |        | 47.6% | 0.0%   | 47.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Not at all          | 0      | 1     | 0.0%   | 4.8%  |
| A little bit        | 4      | 2     | 19.0%  | 9.5%  |
| Somewhat            | 9      | 9     | 42.9%  | 42.9% |
| Quite a bit         | 8      | 7     | 38.1%  | 33.3% |
| A tremendous amount | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 38.1% | 4.8%   | 42.9% |
| Negative            |        | 19.0% | -4.8%  | 14.3% |
| Neutral             |        | 42.9% | 0.0%   | 42.9% |

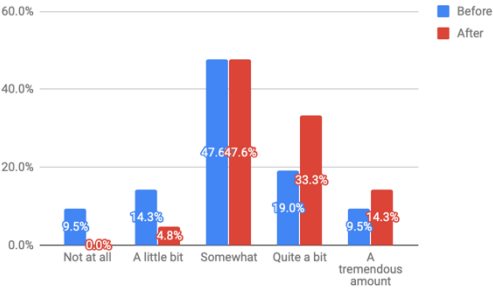
SA8 To what extent were you able to disagree with others without starting an argument?



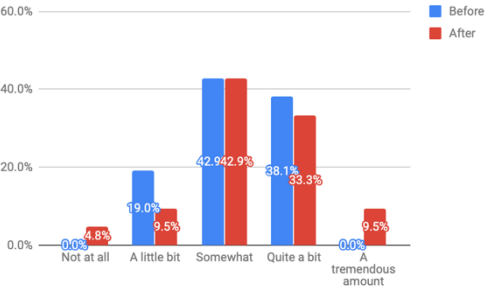
Set 1



Set 2



Set 3



## Appendix J – Pupil Panorama Survey Responses for Self-Management

SM1 – During the past 30 days... How often did you come to class prepared?

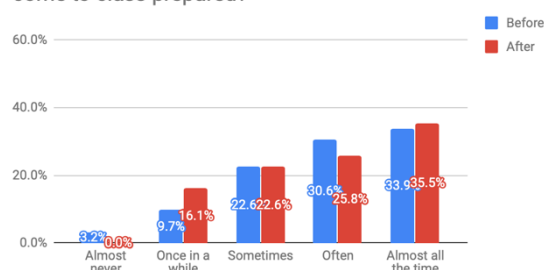
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 0     | 3.2%   | 0.0%  |
| Once in a while     | 6      | 10    | 9.7%   | 16.1% |
| Sometimes           | 14     | 14    | 22.6%  | 22.6% |
| Often               | 19     | 16    | 30.6%  | 25.8% |
| Almost all the time | 21     | 22    | 33.9%  | 35.5% |
| Positive            |        | 64.5% | -3.2%  | 61.3% |
| Negative            |        | 12.9% | 3.2%   | 16.1% |
| Neutral             |        | 22.6% | 0.0%   | 22.6% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 5.0%   | 0.0%  |
| Once in a while     | 1      | 2     | 5.0%   | 10.0% |
| Sometimes           | 1      | 2     | 5.0%   | 10.0% |
| Often               | 4      | 5     | 20.0%  | 25.0% |
| Almost all the time | 13     | 11    | 65.0%  | 55.0% |
| Positive            |        | 85.0% | -5.0%  | 80.0% |
| Negative            |        | 10.0% | 0.0%   | 10.0% |
| Neutral             |        | 5.0%  | 5.0%   | 10.0% |

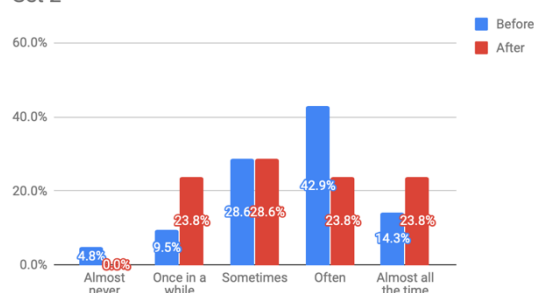
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 4.8%   | 0.0%  |
| Once in a while     | 2      | 5     | 9.5%   | 23.8% |
| Sometimes           | 6      | 6     | 28.6%  | 28.6% |
| Often               | 9      | 5     | 42.9%  | 23.8% |
| Almost all the time | 3      | 5     | 14.3%  | 23.8% |
| Positive            |        | 57.1% | -9.5%  | 47.6% |
| Negative            |        | 14.3% | 9.5%   | 23.8% |
| Neutral             |        | 28.6% | 0.0%   | 28.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 3      | 3     | 14.3%  | 14.3% |
| Sometimes           | 7      | 6     | 33.3%  | 28.6% |
| Often               | 6      | 6     | 28.6%  | 28.6% |
| Almost all the time | 5      | 6     | 23.8%  | 28.6% |
| Positive            |        | 52.4% | 4.8%   | 57.1% |
| Negative            |        | 14.3% | 0.0%   | 14.3% |
| Neutral             |        | 33.3% | -4.8%  | 28.6% |

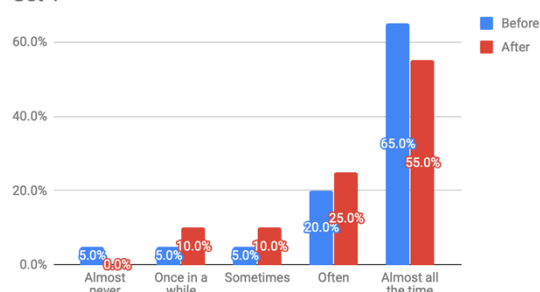
SM1 During the past 30 days... How often did you come to class prepared?



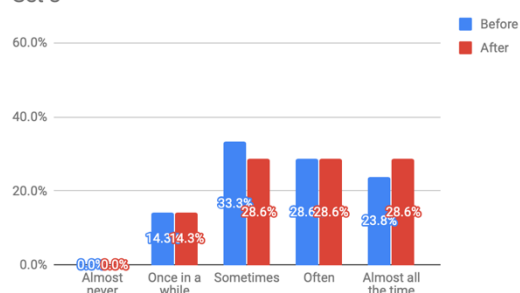
Set 2



Set 1



Set 3



## SM2 – How often did you follow direction in class?

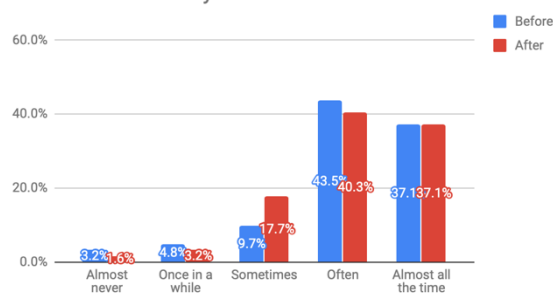
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 1     | 3.2%   | 1.6%  |
| Once in a while     | 3      | 2     | 4.8%   | 3.2%  |
| Sometimes           | 6      | 11    | 9.7%   | 17.7% |
| Often               | 27     | 25    | 43.5%  | 40.3% |
| Almost all the time | 23     | 23    | 37.1%  | 37.1% |
| Positive            |        | 80.6% | -3.2%  | 77.4% |
| Negative            |        | 8.1%  | -3.2%  | 4.8%  |
| Neutral             |        | 9.7%  | 8.1%   | 17.7% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 5.0%   | 0.0%  |
| Once in a while     | 0      | 0     | 0.0%   | 0.0%  |
| Sometimes           | 0      | 3     | 0.0%   | 15.0% |
| Often               | 6      | 6     | 30.0%  | 30.0% |
| Almost all the time | 13     | 11    | 65.0%  | 55.0% |
| Positive            |        | 95.0% | -10.0% | 85.0% |
| Negative            |        | 5.0%  | -5.0%  | 0.0%  |
| Neutral             |        | 0.0%  | 15.0%  | 15.0% |

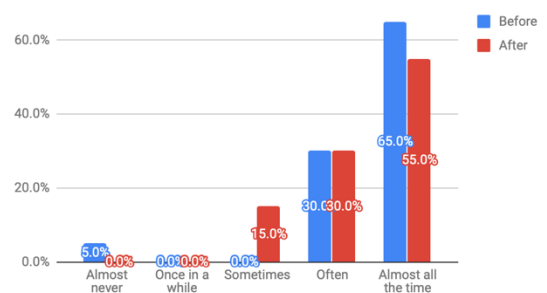
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 1     | 4.8%   | 4.8%  |
| Once in a while     | 2      | 1     | 9.5%   | 4.8%  |
| Sometimes           | 3      | 4     | 14.3%  | 19.0% |
| Often               | 9      | 9     | 42.9%  | 42.9% |
| Almost all the time | 6      | 6     | 28.6%  | 28.6% |
| Positive            |        | 71.4% | 0.0%   | 71.4% |
| Negative            |        | 14.3% | -4.8%  | 9.5%  |
| Neutral             |        | 14.3% | 4.8%   | 19.0% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 1     | 4.8%   | 4.8%  |
| Sometimes           | 3      | 4     | 14.3%  | 19.0% |
| Often               | 12     | 10    | 57.1%  | 47.6% |
| Almost all the time | 4      | 6     | 19.0%  | 28.6% |
| Positive            |        | 76.2% | 0.0%   | 76.2% |
| Negative            |        | 4.8%  | 0.0%   | 4.8%  |
| Neutral             |        | 14.3% | 4.8%   | 19.0% |

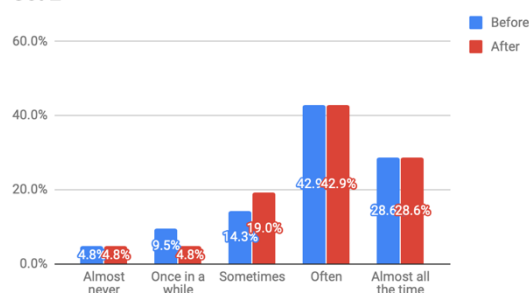
SM2 How often did you follow directions in class?



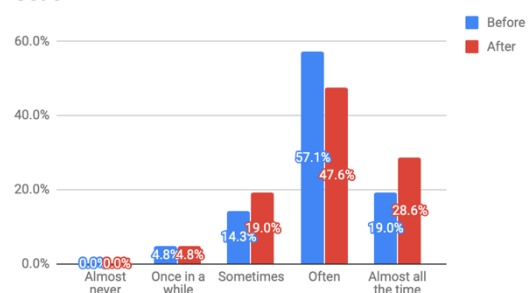
Set 1



Set 2



Set 3



SM3 – How often did you get your work done right away, instead of waiting until last minute?

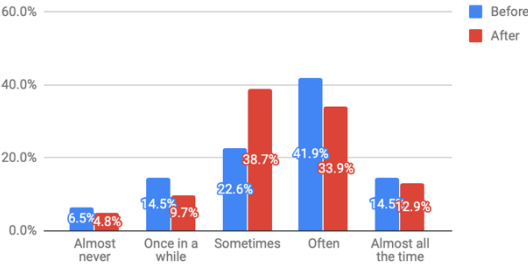
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 4      | 3     | 6.5%   | 4.8%  |
| Once in a while     | 9      | 6     | 14.5%  | 9.7%  |
| Sometimes           | 14     | 24    | 22.6%  | 38.7% |
| Often               | 26     | 21    | 41.9%  | 33.9% |
| Almost all the time | 9      | 8     | 14.5%  | 12.9% |
| Positive            |        | 56.5% | -9.7%  | 46.8% |
| Negative            |        | 21.0% | -6.5%  | 14.5% |
| Neutral             |        | 22.6% | 16.1%  | 38.7% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 2     | 10.0%  | 10.0% |
| Once in a while     | 3      | 1     | 15.0%  | 5.0%  |
| Sometimes           | 2      | 5     | 10.0%  | 25.0% |
| Often               | 10     | 9     | 50.0%  | 45.0% |
| Almost all the time | 3      | 3     | 15.0%  | 15.0% |
| Positive            |        | 65.0% | -5.0%  | 60.0% |
| Negative            |        | 25.0% | -10.0% | 15.0% |
| Neutral             |        | 10.0% | 15.0%  | 25.0% |

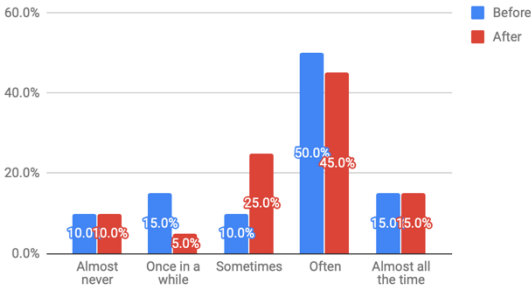
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 1     | 4.8%   | 4.8%  |
| Once in a while     | 2      | 1     | 9.5%   | 4.8%  |
| Sometimes           | 6      | 11    | 28.6%  | 52.4% |
| Often               | 9      | 5     | 42.9%  | 23.8% |
| Almost all the time | 3      | 3     | 14.3%  | 14.3% |
| Positive            |        | 57.1% | -19.0% | 38.1% |
| Negative            |        | 14.3% | -4.8%  | 9.5%  |
| Neutral             |        | 28.6% | 23.8%  | 52.4% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 4.8%   | 0.0%  |
| Once in a while     | 4      | 4     | 19.0%  | 19.0% |
| Sometimes           | 6      | 8     | 28.6%  | 38.1% |
| Often               | 7      | 7     | 33.3%  | 33.3% |
| Almost all the time | 3      | 2     | 14.3%  | 9.5%  |
| Positive            |        | 47.6% | -4.8%  | 42.9% |
| Negative            |        | 23.8% | -4.8%  | 19.0% |
| Neutral             |        | 28.6% | 9.5%   | 38.1% |

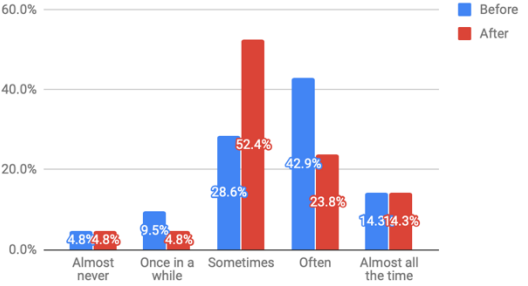
SM3 How often did you get your work done right away, instead of waiting until the last minute?



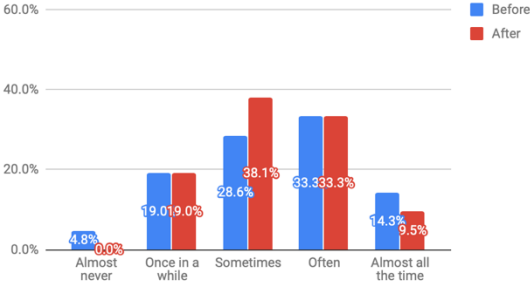
Set 1



Set 2



Set 3



## SM4 – How often did you pay attention and resist distractions?

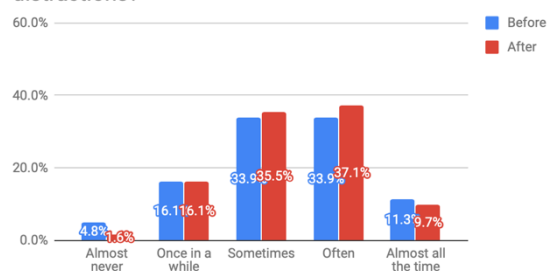
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 3      | 1     | 4.8%   | 1.6%  |
| Once in a while     | 10     | 10    | 16.1%  | 16.1% |
| Sometimes           | 21     | 22    | 33.9%  | 35.5% |
| Often               | 21     | 23    | 33.9%  | 37.1% |
| Almost all the time | 7      | 6     | 11.3%  | 9.7%  |
| Positive            |        | 45.2% | 1.6%   | 46.8% |
| Negative            |        | 21.0% | -3.2%  | 17.7% |
| Neutral             |        | 33.9% | 1.6%   | 35.5% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 5.0%   | 0.0%  |
| Once in a while     | 0      | 2     | 0.0%   | 10.0% |
| Sometimes           | 6      | 5     | 30.0%  | 25.0% |
| Often               | 9      | 11    | 45.0%  | 55.0% |
| Almost all the time | 4      | 2     | 20.0%  | 10.0% |
| Positive            |        | 65.0% | 0.0%   | 65.0% |
| Negative            |        | 5.0%  | 5.0%   | 10.0% |
| Neutral             |        | 30.0% | -5.0%  | 25.0% |

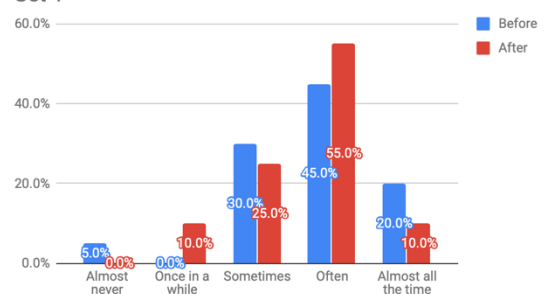
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 1     | 4.8%   | 4.8%  |
| Once in a while     | 3      | 3     | 14.3%  | 14.3% |
| Sometimes           | 9      | 8     | 42.9%  | 38.1% |
| Often               | 8      | 7     | 38.1%  | 33.3% |
| Almost all the time | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 38.1% | 4.8%   | 42.9% |
| Negative            |        | 19.0% | 0.0%   | 19.0% |
| Neutral             |        | 42.9% | -4.8%  | 38.1% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 4.8%   | 0.0%  |
| Once in a while     | 7      | 5     | 33.3%  | 23.8% |
| Sometimes           | 6      | 9     | 28.6%  | 42.9% |
| Often               | 4      | 5     | 19.0%  | 23.8% |
| Almost all the time | 3      | 2     | 14.3%  | 9.5%  |
| Positive            |        | 33.3% | 0.0%   | 33.3% |
| Negative            |        | 38.1% | -14.3% | 23.8% |
| Neutral             |        | 28.6% | 14.3%  | 42.9% |

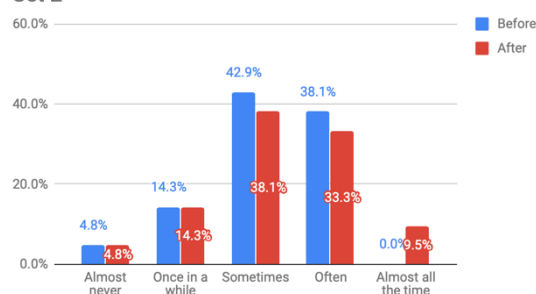
SM4 How often did you pay attention and resist distractions?



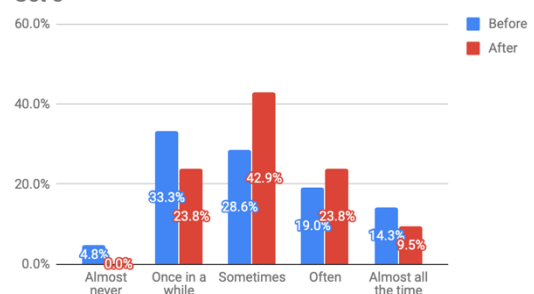
Set 1



Set 2



Set 3



## SM5 – When you were working independently, how often did you stay focused?

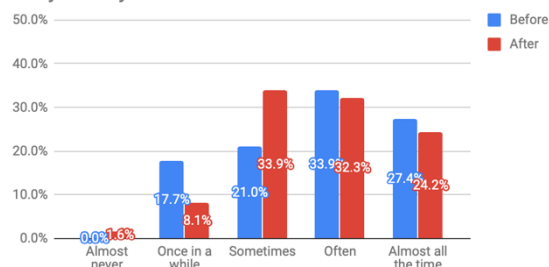
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 1     | 0.0%   | 1.6%  |
| Once in a while     | 11     | 5     | 17.7%  | 8.1%  |
| Sometimes           | 13     | 21    | 21.0%  | 33.9% |
| Often               | 21     | 20    | 33.9%  | 32.3% |
| Almost all the time | 17     | 15    | 27.4%  | 24.2% |
| Positive            |        | 61.3% | -4.8%  | 56.5% |
| Negative            |        | 17.7% | -8.1%  | 9.7%  |
| Neutral             |        | 21.0% | 12.9%  | 33.9% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 1     | 5.0%   | 5.0%  |
| Sometimes           | 4      | 3     | 20.0%  | 15.0% |
| Often               | 7      | 10    | 35.0%  | 50.0% |
| Almost all the time | 8      | 6     | 40.0%  | 30.0% |
| Positive            |        | 75.0% | 5.0%   | 80.0% |
| Negative            |        | 5.0%  | 0.0%   | 5.0%  |
| Neutral             |        | 20.0% | -5.0%  | 15.0% |

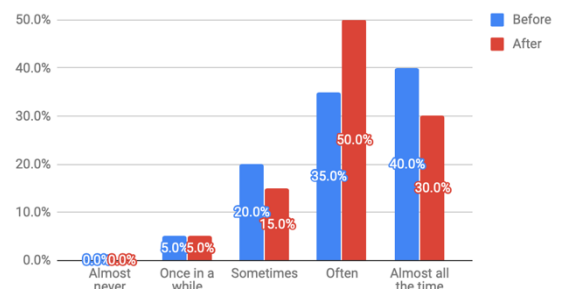
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 1     | 0.0%   | 4.8%  |
| Once in a while     | 4      | 2     | 19.0%  | 9.5%  |
| Sometimes           | 7      | 8     | 33.3%  | 38.1% |
| Often               | 7      | 3     | 33.3%  | 14.3% |
| Almost all the time | 3      | 7     | 14.3%  | 33.3% |
| Positive            |        | 47.6% | 0.0%   | 47.6% |
| Negative            |        | 19.0% | -4.8%  | 14.3% |
| Neutral             |        | 33.3% | 4.8%   | 38.1% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 6      | 2     | 28.6%  | 9.5%  |
| Sometimes           | 2      | 10    | 9.5%   | 47.6% |
| Often               | 7      | 7     | 33.3%  | 33.3% |
| Almost all the time | 6      | 2     | 28.6%  | 9.5%  |
| Positive            |        | 61.9% | -19.0% | 42.9% |
| Negative            |        | 28.6% | -19.0% | 9.5%  |
| Neutral             |        | 9.5%  | 38.1%  | 47.6% |

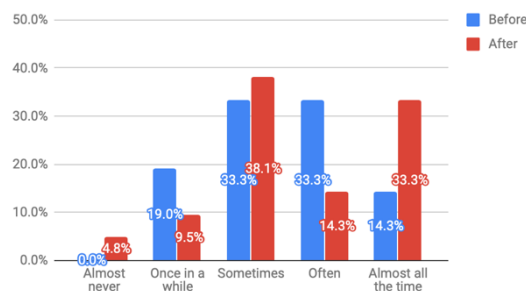
SM5 When you were working independently, how often did you stay focused?



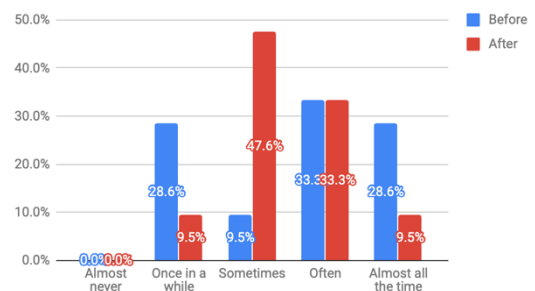
Set 1



Set 2



Set 3



SM6 – How often did you remain calm, even when someone was bothering you or saying bad things?

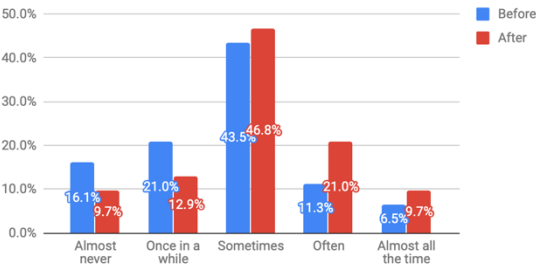
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 10     | 6     | 16.1%  | 9.7%  |
| Once in a while     | 13     | 8     | 21.0%  | 12.9% |
| Sometimes           | 27     | 29    | 43.5%  | 46.8% |
| Often               | 7      | 13    | 11.3%  | 21.0% |
| Almost all the time | 4      | 6     | 6.5%   | 9.7%  |
| Positive            |        | 17.7% | 12.9%  | 30.6% |
| Negative            |        | 37.1% | -14.5% | 22.6% |
| Neutral             |        | 43.5% | 3.2%   | 46.8% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 4      | 4     | 20.0%  | 20.0% |
| Once in a while     | 3      | 1     | 15.0%  | 5.0%  |
| Sometimes           | 8      | 9     | 40.0%  | 45.0% |
| Often               | 3      | 4     | 15.0%  | 20.0% |
| Almost all the time | 2      | 2     | 10.0%  | 10.0% |
| Positive            |        | 25.0% | 5.0%   | 30.0% |
| Negative            |        | 35.0% | -10.0% | 25.0% |
| Neutral             |        | 40.0% | 5.0%   | 45.0% |

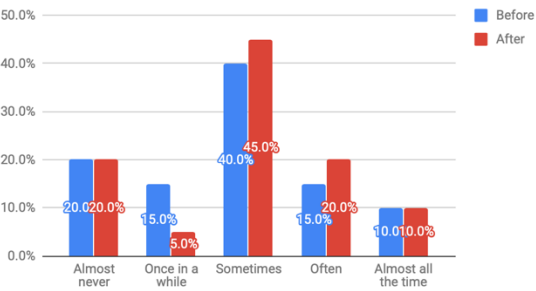
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 3      | 1     | 14.3%  | 4.8%  |
| Once in a while     | 4      | 3     | 19.0%  | 14.3% |
| Sometimes           | 11     | 10    | 52.4%  | 47.6% |
| Often               | 1      | 5     | 4.8%   | 23.8% |
| Almost all the time | 2      | 2     | 9.5%   | 9.5%  |
| Positive            |        | 14.3% | 19.0%  | 33.3% |
| Negative            |        | 33.3% | -14.3% | 19.0% |
| Neutral             |        | 52.4% | -4.8%  | 47.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 3      | 1     | 14.3%  | 4.8%  |
| Once in a while     | 6      | 4     | 28.6%  | 19.0% |
| Sometimes           | 8      | 10    | 38.1%  | 47.6% |
| Often               | 3      | 4     | 14.3%  | 19.0% |
| Almost all the time | 0      | 2     | 0.0%   | 9.5%  |
| Positive            |        | 14.3% | 14.3%  | 28.6% |
| Negative            |        | 42.9% | -19.0% | 23.8% |
| Neutral             |        | 38.1% | 9.5%   | 47.6% |

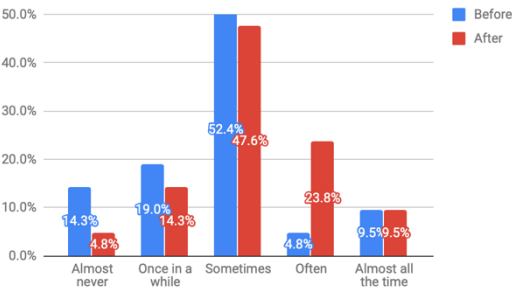
SM6 How often did you remain calm, even when someone was bothering you or saying bad things?



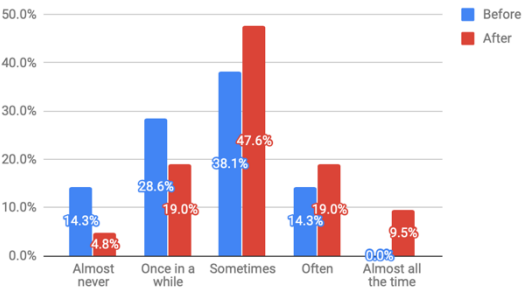
Set 1



Set 2



Set 3



SM7 – How often did you allow others to speak without interruption?

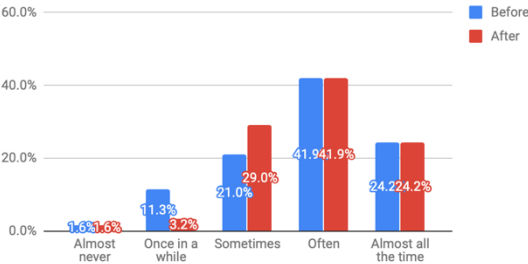
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 1     | 1.6%   | 1.6%  |
| Once in a while     | 7      | 2     | 11.3%  | 3.2%  |
| Sometimes           | 13     | 18    | 21.0%  | 29.0% |
| Often               | 26     | 26    | 41.9%  | 41.9% |
| Almost all the time | 15     | 15    | 24.2%  | 24.2% |
| Positive            |        | 66.1% | 0.0%   | 66.1% |
| Negative            |        | 12.9% | -8.1%  | 4.8%  |
| Neutral             |        | 21.0% | 8.1%   | 29.0% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 1     | 5.0%   | 5.0%  |
| Once in a while     | 2      | 0     | 10.0%  | 0.0%  |
| Sometimes           | 4      | 3     | 20.0%  | 15.0% |
| Often               | 5      | 9     | 25.0%  | 45.0% |
| Almost all the time | 8      | 7     | 40.0%  | 35.0% |
| Positive            |        | 65.0% | 15.0%  | 80.0% |
| Negative            |        | 15.0% | -10.0% | 5.0%  |
| Neutral             |        | 20.0% | -5.0%  | 15.0% |

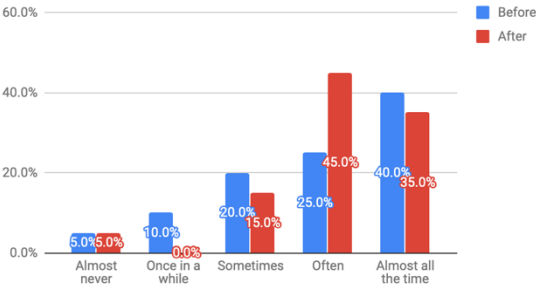
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 4      | 2     | 19.0%  | 9.5%  |
| Sometimes           | 2      | 6     | 9.5%   | 28.6% |
| Often               | 12     | 8     | 57.1%  | 38.1% |
| Almost all the time | 3      | 5     | 14.3%  | 23.8% |
| Positive            |        | 71.4% | -9.5%  | 61.9% |
| Negative            |        | 19.0% | -9.5%  | 9.5%  |
| Neutral             |        | 9.5%  | 19.0%  | 28.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 0     | 4.8%   | 0.0%  |
| Sometimes           | 7      | 9     | 33.3%  | 42.9% |
| Often               | 9      | 9     | 42.9%  | 42.9% |
| Almost all the time | 4      | 3     | 19.0%  | 14.3% |
| Positive            |        | 61.9% | -4.8%  | 57.1% |
| Negative            |        | 4.8%  | -4.8%  | 0.0%  |
| Neutral             |        | 33.3% | 9.5%   | 42.9% |

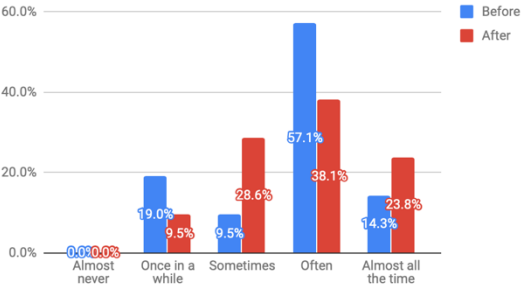
SM7 How often did you allow others to speak without interruption?



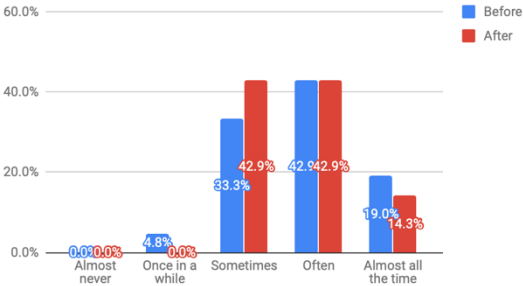
Set 1



Set 2



Set 3



SM8 – How often were you polite to adults?

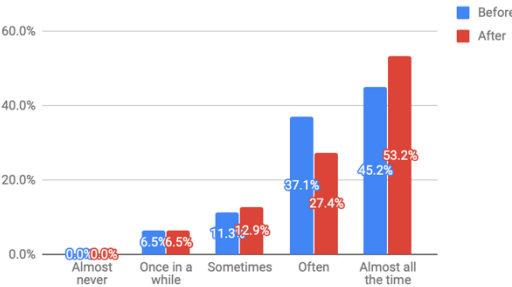
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 4      | 4     | 6.5%   | 6.5%  |
| Sometimes           | 7      | 8     | 11.3%  | 12.9% |
| Often               | 23     | 17    | 37.1%  | 27.4% |
| Almost all the time | 28     | 33    | 45.2%  | 53.2% |
| Positive            |        | 82.3% | -1.6%  | 80.6% |
| Negative            |        | 6.5%  | 0.0%   | 6.5%  |
| Neutral             |        | 11.3% | 1.6%   | 12.9% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 0     | 5.0%   | 0.0%  |
| Sometimes           | 2      | 2     | 10.0%  | 10.0% |
| Often               | 4      | 5     | 20.0%  | 25.0% |
| Almost all the time | 13     | 13    | 65.0%  | 65.0% |
| Positive            |        | 85.0% | 5.0%   | 90.0% |
| Negative            |        | 5.0%  | -5.0%  | 0.0%  |
| Neutral             |        | 10.0% | 0.0%   | 10.0% |

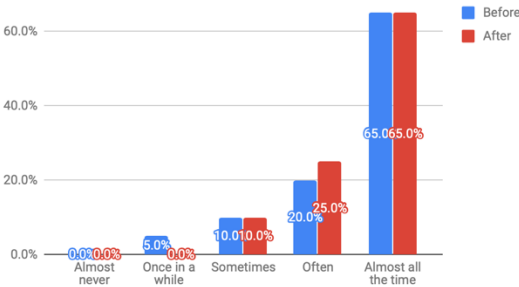
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 2     | 4.8%   | 9.5%  |
| Sometimes           | 4      | 3     | 19.0%  | 14.3% |
| Often               | 10     | 6     | 47.6%  | 28.6% |
| Almost all the time | 6      | 10    | 28.6%  | 47.6% |
| Positive            |        | 76.2% | 0.0%   | 76.2% |
| Negative            |        | 4.8%  | 4.8%   | 9.5%  |
| Neutral             |        | 19.0% | -4.8%  | 14.3% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 2      | 2     | 9.5%   | 9.5%  |
| Sometimes           | 1      | 3     | 4.8%   | 14.3% |
| Often               | 9      | 6     | 42.9%  | 28.6% |
| Almost all the time | 9      | 10    | 42.9%  | 47.6% |
| Positive            |        | 85.7% | -9.5%  | 76.2% |
| Negative            |        | 9.5%  | 0.0%   | 9.5%  |
| Neutral             |        | 4.8%  | 9.5%   | 14.3% |

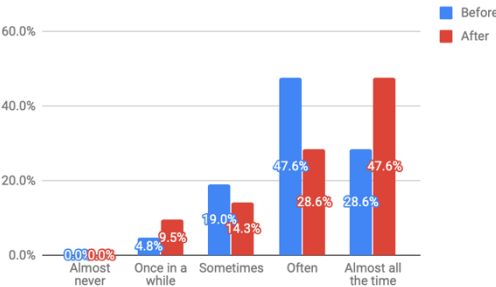
SM8 How often were you polite to adults?



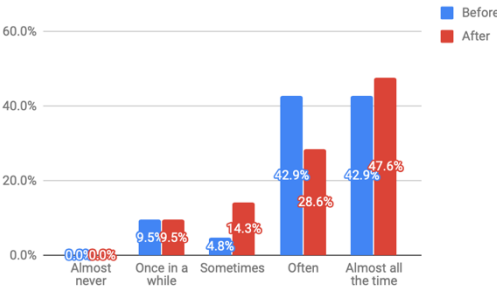
Set 1



Set 2



Set 3



SM9 – How often were you polite to other students?

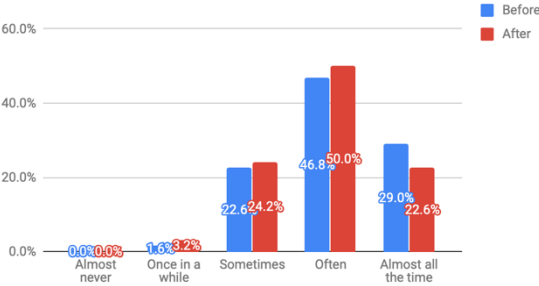
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 2     | 1.6%   | 3.2%  |
| Sometimes           | 14     | 15    | 22.6%  | 24.2% |
| Often               | 29     | 31    | 46.8%  | 50.0% |
| Almost all the time | 18     | 14    | 29.0%  | 22.6% |
| Positive            |        | 75.8% | -3.2%  | 72.6% |
| Negative            |        | 1.6%  | 1.6%   | 3.2%  |
| Neutral             |        | 22.6% | 1.6%   | 24.2% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 0      | 0     | 0.0%   | 0.0%  |
| Sometimes           | 2      | 3     | 10.0%  | 15.0% |
| Often               | 9      | 11    | 45.0%  | 55.0% |
| Almost all the time | 9      | 6     | 45.0%  | 30.0% |
| Positive            |        | 90.0% | -5.0%  | 85.0% |
| Negative            |        | 0.0%  | 0.0%   | 0.0%  |
| Neutral             |        | 10.0% | 5.0%   | 15.0% |

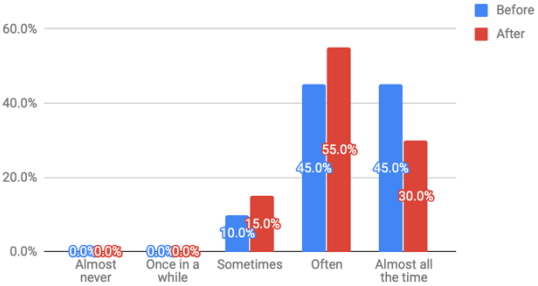
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 0      | 1     | 0.0%   | 4.8%  |
| Sometimes           | 5      | 8     | 23.8%  | 38.1% |
| Often               | 12     | 7     | 57.1%  | 33.3% |
| Almost all the time | 4      | 5     | 19.0%  | 23.8% |
| Positive            |        | 76.2% | -19.0% | 57.1% |
| Negative            |        | 0.0%  | 4.8%   | 4.8%  |
| Neutral             |        | 23.8% | 14.3%  | 38.1% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 1      | 1     | 4.8%   | 4.8%  |
| Sometimes           | 7      | 4     | 33.3%  | 19.0% |
| Often               | 8      | 13    | 38.1%  | 61.9% |
| Almost all the time | 5      | 3     | 23.8%  | 14.3% |
| Positive            |        | 61.9% | 14.3%  | 76.2% |
| Negative            |        | 4.8%  | 0.0%   | 4.8%  |
| Neutral             |        | 33.3% | -14.3% | 19.0% |

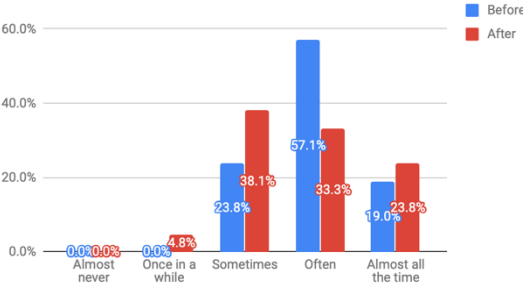
SM9 How often were you polite to other students?



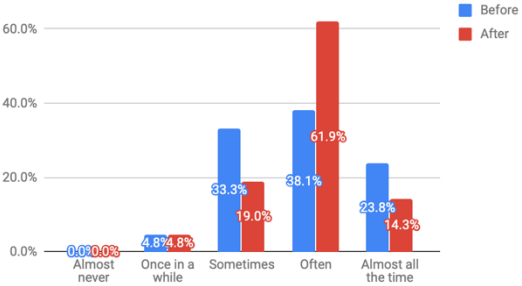
Set 1



Set 2



Set 3



SM10 – How often did you keep your temper in check?

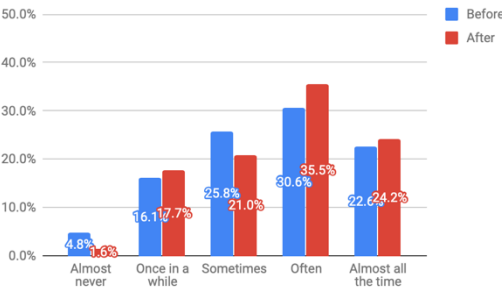
| All                 |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 3      | 1     | 4.8%   | 1.6%  |
| Once in a while     | 10     | 11    | 16.1%  | 17.7% |
| Sometimes           | 16     | 13    | 25.8%  | 21.0% |
| Often               | 19     | 22    | 30.6%  | 35.5% |
| Almost all the time | 14     | 15    | 22.6%  | 24.2% |
| Positive            |        | 53.2% | 6.5%   | 59.7% |
| Negative            |        | 21.0% | -1.6%  | 19.4% |
| Neutral             |        | 25.8% | -4.8%  | 21.0% |

| Set 1               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 0      | 0     | 0.0%   | 0.0%  |
| Once in a while     | 3      | 4     | 15.0%  | 20.0% |
| Sometimes           | 5      | 4     | 25.0%  | 20.0% |
| Often               | 5      | 5     | 25.0%  | 25.0% |
| Almost all the time | 7      | 7     | 35.0%  | 35.0% |
| Positive            |        | 60.0% | 0.0%   | 60.0% |
| Negative            |        | 15.0% | 5.0%   | 20.0% |
| Neutral             |        | 25.0% | -5.0%  | 20.0% |

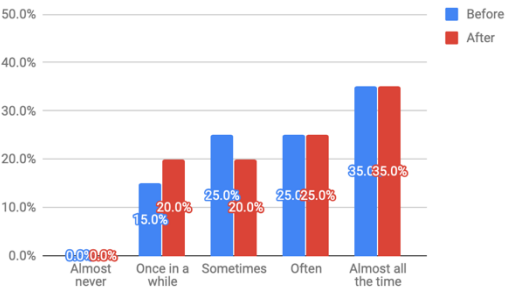
| Set 2               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 1      | 0     | 4.8%   | 0.0%  |
| Once in a while     | 5      | 4     | 23.8%  | 19.0% |
| Sometimes           | 7      | 6     | 33.3%  | 28.6% |
| Often               | 4      | 7     | 19.0%  | 33.3% |
| Almost all the time | 4      | 4     | 19.0%  | 19.0% |
| Positive            |        | 38.1% | 14.3%  | 52.4% |
| Negative            |        | 28.6% | -9.5%  | 19.0% |
| Neutral             |        | 33.3% | -4.8%  | 28.6% |

| Set 3               |        |       |        |       |
|---------------------|--------|-------|--------|-------|
|                     | Before | After | Before | After |
| Almost never        | 2      | 1     | 9.5%   | 4.8%  |
| Once in a while     | 2      | 3     | 9.5%   | 14.3% |
| Sometimes           | 4      | 3     | 19.0%  | 14.3% |
| Often               | 10     | 10    | 47.6%  | 47.6% |
| Almost all the time | 3      | 4     | 14.3%  | 19.0% |
| Positive            |        | 61.9% | 4.8%   | 66.7% |
| Negative            |        | 19.0% | 0.0%   | 19.0% |
| Neutral             |        | 19.0% | -4.8%  | 14.3% |

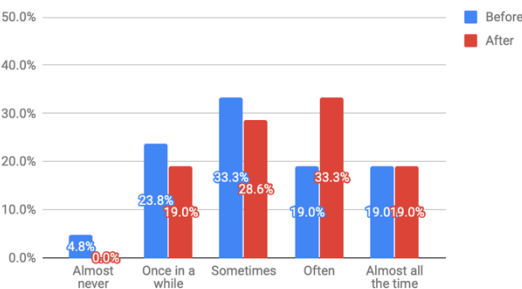
SM10 How often did you keep your temper in check?



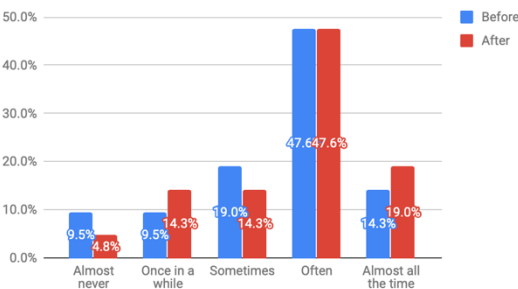
Set 1



Set 2

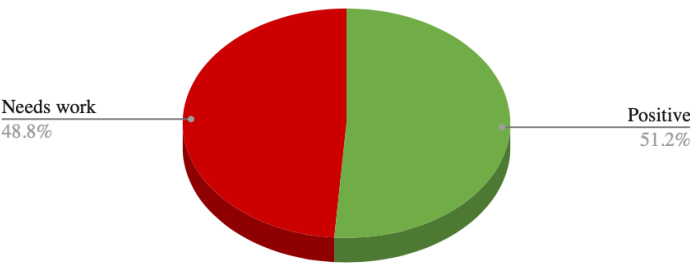


Set 3

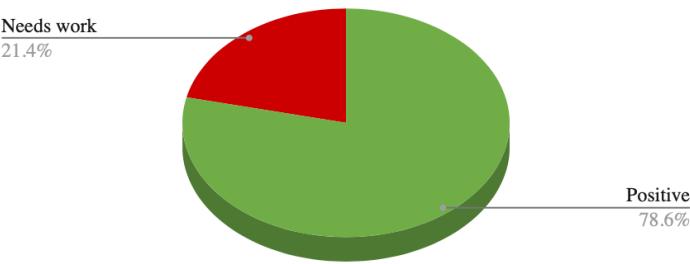


Appendix K – Teacher Observations

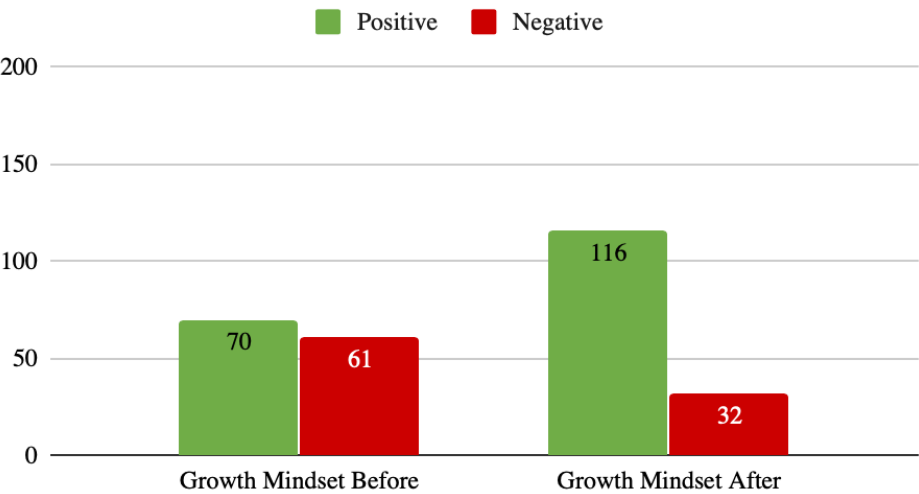
Overall: Positive Vs Negative Points BEFORE Intervention



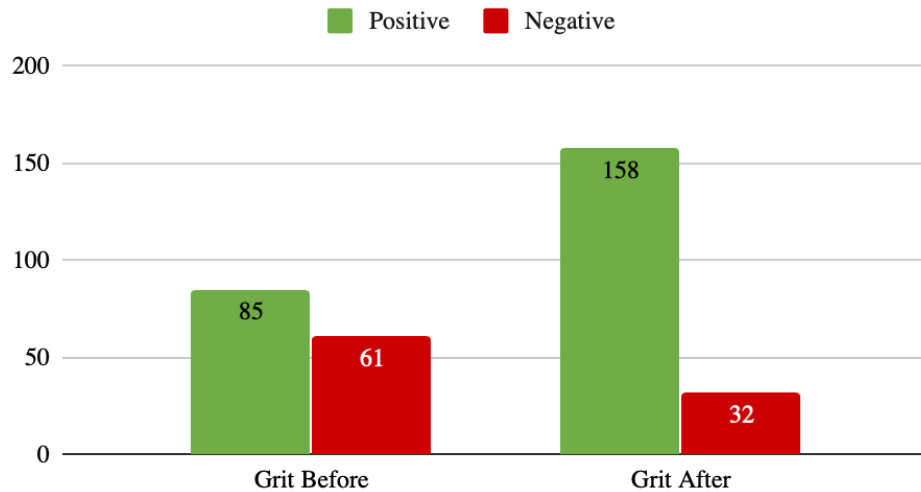
Overall: Positive Vs Negative Points AFTER Intervention



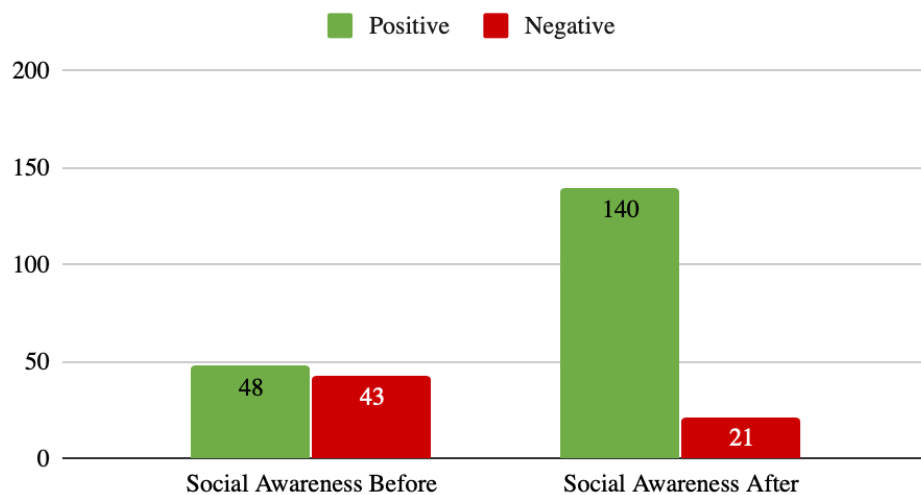
Class Dojo Points Awarded for Growth Mindset



### Class Dojo Points Awarded for Grit



### Class Dojo Points Awarded for Social Awareness



### Class Dojo Points Awarded for Self-Management

