Abstract
The influence of homogeneous grouping on pupils’ self-perceive learning behaviour in a Year 4 mathematics class was investigated, using the planned behaviour framework as a guide. The small-scale study shows differences in pupils’ self-assessed learning behaviour, such that the behaviour intent, social normative beliefs, attitudes and perceived behaviour control of students in lower-attaining groups are less favourable in comparison to groups of higher-attaining students. Pupils in lower-attaining groups rated themselves as less confident in their ability; fear to show incompetence in the classroom; find learning mathematics less valuable; and are less resilient than their peers when faced with a challenge. The author does not condemn the usage of homogeneous grouping but proposes that attainment grouping depends on: the subject being taught; the adult to student ratio; the complexity of the concept being taught and the diversity within the class. The results and practical implications are discussed below.

Introduction
A pupil’s learning behaviour is a function of their salient beliefs specific to their intention to perform that behaviour (Sideridis, 2005). It assumes that learning is an intentional and deliberate process where a pupil’s beliefs are linked to their learning behaviour (Fishbein and Ajzen 2011; Sideridis, 2005). The research in which within-class attainment grouping has such influence on learning behaviour has been investigated extensively (e.g. Duckworth et al., 2009; Schofield, 2010; Slavin, 1990; Smith and Sutherland, 2006) with inconclusive findings. Research, such as by Robinson (2008), has argued that categorising pupils exacerbates inequality, but can still raise language and reading skills through tailored instructions. Bong and Skaalvik (2003) would suggest this to be impossible, as self-academic concept and self-efficacy are both predictors of academic performance. Scholars supporting Bong and Skaalvik’s (2003) reasoning have discovered that stratifying students lowers self-efficacy and self-esteem, due to greater social comparison and competitiveness (Wilson, 2017; Chmielewski, 2013), with adverse impacts on pupils’ attitudes (Martin, 2017). Following this argument, within-class attainment grouping would not be able to meet the objective of raising academic performance and preferred learning behaviour in the classroom. Hong et al. (2012) also found there to be no overall advantage to homogeneous grouping for higher-attaining students. Furthermore, the authors also discovered that mid-attaining students would show more desirable learning behaviour when more than 1 hour per day was spent giving instructions. Lower-attaining students would need more than 1 hour per day for homogeneous grouping to be effective. In theory, homogeneous grouping reduces the diversity of the class for teachers and therefore enables them to spend more time targeting groups with similar attributes. Pupils are more able to access learning material by being appropriately supported and challenged. Students’ attainment has been seen to rise in conjunction with their learning behaviour by meeting these suggestions outlined by Hong et al., (2012).

In light of the inconclusive research findings, an examination of pupils’ perspective of their learning behaviour was the purpose of the investigation using the planned behaviour framework (Ajzen, 1991); this enabled me to reflect on the evidence in an informed manner and develop my teaching accordingly. Hornby and Witte’s (2014) definition of attainment (ability) grouping is followed, which
refers to the practice of grouping pupils and tasks by their attainment and is subject to the evaluative criteria of the teacher. The aim is not to criticise the school’s approach but to assist in the development of my own practice. The following question is therefore asked:

Does within-class attainment grouping influence students’ perspective of their learning behaviour?

Literature review
The theory of planned behaviour postulates that perceived behavioural control (the perceived presence or absence of the ability to achieve the intended learning), subjective norms (normative beliefs about the behaviour in relation to the perceived importance of others) and attitudes (behavioural beliefs towards the relevance and importance of learning) shape pupils’ intended learning behaviour (Fishbein and Ajzen, 2011). In this context learning readiness is determined by an individual’s intention, which is under the influence of the organisation and management of the classroom and particularly the use of attainment grouping. This intention to learn captures motivational factors such as the effort students are planning to exert for a lesson. Within the definition of attainment grouping, the structure of a classroom and the associated goals (lesson objectives and success criteria) have a net-impact on students, such that each group have a set of different targets. In an environment where tasks/tables are tailored by attainment-groups, students may develop a fixed mindset towards their own intelligence (Wiliam and Bartholomew, 2004). Their perception of themselves may therefore be that they are lower-attainers or higher-attainers. While the teacher may manage this perception and develop some fluidity in the choice of the challenge, students may feel they are set in a group. Students’ motivation therefore faces either a glass ceiling to their aspiration or they perceive to have reached the highest-attainment level (Hallam, Ireson, and Davies 2002). Motivation to engage in learning, including group activities, would hypothetically be also limited. But research from Saleh, Lazonder and De Jong (2005) found that grouping homogeneously positively influences collaborative learning. A reason for these findings is that students increase in confidence to express ideas within the presence of like-minded peers. The motivation to contribute to the lesson, that is students’ confidence to challenge themselves to master the material, can increase their achievement and aspirations (Saleh et al., 2005). Nonetheless, authors including Fendler and Muzaffar (2008) counter such ideas, stating that stratifying students can have no net-positive impact due to unnatural competition given in a greater social comparison.

Social and normative beliefs
Self-identity and social-identity are invariably interlinked with motivational (intended) behaviours. While self-identity is the perception of one’s characteristics as a student, social-identity is the perception of a pupil based on their membership in a group (Hogg, and Reid, 2006). A child therefore has distinctive components of the self, each with a role or position they occupy in life which changes over time and within difference contexts. Central to this idea is that the self is conceived as a collection of identities that reflect the role a child plays in a social structure (Kemp et al. 1999). Arguably, children’s membership to groups (their social structure) has an inextricable link to learning intention and performance. The structure of the classroom affects how they evaluate themselves (Swann, 2012). From this theoretical lens, attainment grouping promotes social segregation and comparisons amongst groups. Research from as early as 1984 supports this notion (Marsh, 1984) whilst Ireson and Hallam (1999) continue to find similar evidence. A possible reason for this behaviour is students’ possible fear of showing incompetence in a subject (Shaw, 2014). In such instance, lower-attainment students would show an avoidance to contribute in lessons when placed in a heterogenous group. The opposite, however, has been found in Saleh et al.’s (2004) study, where heterogeneous groups produced a higher ratio of individual elaboration across all attainment groups, comparatively to students in homogenous groups. Hypothetically, students in homogenous groups would, therefore, be less likely to learn for their own satisfaction and more the approval of other members in their social circle such as parents, friends and teachers. No conclusive evidence can be given for whether differences in attainment grouping has an influence on who students work for; but findings by Shaw (2014) demonstrated that higher-attainment students were more determined to challenge
themselves, while lower-attainment students had fear in showing incompetence and were less likely to extend themselves. This suggests that higher-attainment students are more driven to learn for themselves, whereas lower-attainment students want to impress their social circle. Pupils’ social identity would therefore be best in heterogeneous structures and Boaler (2008) concluded that students not only improve in their ability to work with others but also learned to respect other cultures, educational levels and genders. Saleh et al.’s (2004) main findings further supports this to the extent where heterogeneous groups improved lower-attainment students’ performance as well as motivation, while higher-attainers improved in either grouping setting. It is interesting to note, however, that mid-attainment students only benefit when placed in homogenous groups. The social structure therefore is connected to a student’s attitude as it sets the expectations and behaviour towards learning.

**Attitudes**
The expectations that students have of themselves and how they attribute their success and failures is partly subject to teacher expectations (Swann, 2012), which students may interpret through the lens of how they are being grouped. Thus, the behaviour that students develop towards learning requires cognitive information processes, where children hold specific attitudinal beliefs about themselves and associate them with certain characteristics of learning (e.g. learning x is useful/useless). As such, the group that students are placed in will have a direct influence on their learning attitudes and the expectation they have of themselves (Adodo and Agbayewa, 2011). Within the debate of attainment grouping, Hallam and Deathe (2002) found no adverse effect on students’ expectation and attitude formation. Similarly, Ireson and Hallam (2001) also found limited adverse impacts of attainment grouping on students’ attitudes towards learning but argued that expectations are contained or managed in parameters. These discoveries may be explained by the teacher’s ability to provide the integral requirement, set by Hong et al. (2012), of providing the necessary interaction with all attainment groups. Such interaction requires that tasks are also tailored allowing children to access the learning more readily with necessary supporting material in place and questions set appropriately. Other authors have suggested that attitude formation may be influenced by aspects such as the likeliness of friendships groups (Shaw, 2014). Group interaction was more present in homogeneous groups, as Saleh et al., (2004) discovered. However, Wilson (2017) found that students enjoyed being in mixed-attainment groups as the like mindedness depends on personality rather than attainment.

**Perceived behavioural control**
When attitudes are formed, students will develop beliefs of their capabilities to learn, acquire new skills and solve problems (Underwood, 2012). Perceived behavioural control (PBC) therefore conceptualises pupils’ belief in themselves by measuring the perception of cognitive obstacles and the ability to sustain effort when engaging with challenging questions (Fishbein and Ajzen 2011). The perceived obstacles can be in part based on second-hand information that other pupils or even teachers have experienced (Bandura, 2006). In other words, pupils may anticipate perceived obstacles before encountering them in class. Often teachers will decide the seating of students, which students may interpret as an (anticipated) obstacle. For instance, students in lower-attainment groups may perceive there to be a ‘glass ceiling’ by continuously working on what is known to them as a lower challenging assignment on a table that is known as the support group. Mastering the material may then be interpreted by the challenge and the expectations associated with it, rather than the understanding and application of it. Boaler (2008) found that lower-attainment children sometimes perceive that the expectations are lower and the tasks too easy. The perceived attainment to achieve a more challenging assignment as well as to continue to try would therefore be contained by the anticipated barriers in place. As a teacher, I have found that higher-attaining children felt pressured to perform by the high expectation to do well. From this lens, students develop a frame of reference of their academic abilities supporting the stigma of inter- and outer- groups where students may
favour their own, or envy other groups more than the one they are already in, feeling some bias based on their own or secondary information (Marsh, 1984; Henry, 2015).

Teachers, including myself, may choose to adopt a homogenous organisational strategy with the aim to address the inequality achievement gap and promote good learning behaviour - we may, however, find this strategy flawed. Although pupils’ behaviour when grouped may promote collaborative learning, individual contribution may decrease due to their perception of being incompetent, the expectation and attitudes towards learning, or perceived learning barriers.

This review opens up the numerous questions about the validity of attainment grouping in the primary classroom, which are pursued in this paper in relation to the following research questions:

1. Does within-class attainment grouping influence a Year 4 student’s perspective of their learning behaviour in mathematics?
2. How does learning behaviour differ between the three attainment groups?

**Methodology and ethics**
Throughout my data collection, I have adhered to the ethical guidelines for educational research, including guidelines set by the University of Cambridge, Faculty of Education and based on BERA guidelines (British Educational Research Association, 2011). In line with the privacy guidelines I have ensured that no data is presented in an identifiable manner and that pseudonyms are used throughout. Twenty-three parents/guardians provided written consent for their child’s participation. A mixed-method approach was taken because it is strongly supported by Creswell (2007) and Johnson and Onwuegbuzie (2004) who argued that questionnaires and interviews help to deepen the understanding of the data given as well as cross reference and check reliability of findings. Furthermore, the use of mixed method also provided a foundation to understand the extent to which within class attainment grouping influence children own self- perception of their learning behaviour. In other words, interviews helped to understand how much homogenous grouping influences their learning behaviour.

For focus, TACT (target, action, context and time) (Francis et al., 2004) principles were applied in which the target group were 23 pupils from a Year 4 class who have been exposed to the use of attainment grouping for more than one year. Their age meant that they are aware of attainment groups and the social-structure associated with it, as shown in Shaw’s (2003) study. Data was collected from 30/11/2017 to 09/02/2018 with the behaviour (or action) under study being pupils’ self-reflection of their learning intention when grouped in a mathematics lesson (context).

Three distinct aspect of beliefs were measured: attitudinal, social, control and learning intention. In determining learning intention, the emphasis was on grouping and how children perceive it to influence their planned effort, readiness and confidence to challenge themselves and learn the material. Attitudes evaluated the pleasant/unpleasant, useful/useless, valuable/worthless aspects of learning mathematics. In referring to the opinions of important people/groups such as friends, parents and teachers, social norms measured how students compare themselves to other pupils in their class. Perceived behavioural control measured the extent to which pupils believe they could complete a challenging question. The focus was on their own beliefs to overcome and self-evaluated obstacles.

In the design of the questionnaire I applied the principles of compatibility; a method that specifies the behaviour under consideration to strengthen the understanding of the behaviour. In other words, this study focused on students’ reflection on their own beliefs and behaviour. Therefore, to ensure that the principles are not violated, specific questions were omitted from the results as they did not focus on the target behaviour thereby would have violated the principles which would have obscured the results and the conclusion drawn from them.
Questionnaire measure of self-reported behaviour
A self-reported measure of behaviour was chosen instead of an indirect or scenario measure because it complies more readily with the principles of comparability thus results are a more accurate reflection of students’ perceptions. A unipolar scale (e.g. from 1 to 7) was selected in comparison to bipolar (e.g. from -3 to +3), due the accessibility for children to understand the behaviour under study. An odd number likert scale was selected because it helps avoid students simply selecting the middle number in an even scale, ensuring students would take time to think about their answer. The decision to not use emoticon likert scales as found in other studies (such as Shaw, 2003) was because students’ attention (thus answer) may be influenced by the positive image (Winkielman, Berridge, and Wilbarger, 2005).

Interview
The interview objective was to provide further detail to the responses children gave in the questionnaires as well as deepen the understanding of children’s perception, awareness and knowledge of attainment grouping. 15 students were selected, 5 from each attainment group. The sample size and selection of participants was therefore not random but a deliberate process to select pupils with known characteristics, in this instance their attainment group. Interviews were semi-structured to guide the conversations and maintain focus on critical questions while allowing students to express themselves and elaborate on various aspects associated with being grouped. Students were interviewed on an individual basis to ensure they felt confident to discuss any aspects they wanted to keep private (Denscombe, 1998).

Findings and discussion
The questionnaire results show differences in learning behaviour (figure 1). As postulated, intentional learning behaviour is weaker in students of lower-attainment groups and some differences can be found in students’ attitudes and control beliefs. While this indicates that within-class attainment groupings could have some impact on students’ learning behaviour, variation in normative beliefs does not support the argument. This could be due the range of questions selected, and the scales chosen. Consequently, the data is broken down into four subsections based on each of the four constructs.
Learning Intention
Student level of intention (and engagement) to learn is different for each attainment group; the confidence is greater in higher-attainment groups. Students’ desire to understand the material also differs with a greater need for higher-attainment students to understand what is being taught (figure 2). This could be interpreted that attainment grouping promotes a perceived form of a fixed mindset (William and Bartholomew, 2004), leading weight to Hallam, Ireson, and Davies’ (2002) hypothesis in which students of lower-attainment groups face a perceived ceiling to their aspiration through their grouping. This perspective is further supported by the data found in relation to social-norms in which lower-attainment grouped children have a greater need to impress/work for the teacher than for themselves (figure 3). Arguably, pupils’ perception could be based on the teaching approach. For instance, Ireson and Hallam (1999) recognised that children in lower-attainment groups were given more structured and monotonous activities, which may reflect the low expectations of these learners. Hart et al., (2004) also argued that teacher who overuse homogeneous attainment grouping have a narrow view of the curriculum design. However, in the school in which the research was conducted, this seems unlikely. Ofsted’s Report (2013) for the school states that the school provides “challenging lessons delivered by knowledgeable teacher” and “pupils show consistently positive behaviour towards learning”. Students also have the freedom to choose their own level of challenge, which on occasion is guided by the teacher. As pupil X said “It shows us how we want to challenge ourselves. We have one chilli which would be the normal, two chillies which is in the middle and three chillies, which is really hard”. From a teacher’s perspective, the data suggests that students when grouped homogeneously would greatly benefit from motivation incorporated into their teaching. Interesting to note, however, are the mid-attainment groups who have a strong drive to understand the material and to challenge themselves but are not as confident in their learning abilities. A possible explanation could be their fear of showing incompetence, as Shaw (2014) indicates.
**Social and normative beliefs** Pupils in lower-attainment groups tend have a greater need to avoid showing a lack of understanding in mathematics. This may reflect in their lower desire to help others or even their inability to help others, as well as their need to be the best at ‘their table’. These findings reflect McIntyre and Ireson’s (2002) argument in which attainment grouping develops a pupil’s view of their own ability. Ireson and Hallam (2001) also argued that grouping creates a frame of reference in which pupils categorise part of their self-identify in their social structure. This would also explain why pupils grouped in lower-attainment groups have a greater desire to be seated in a different group. ‘For whom to do well’ (the teacher, themselves, their friends and/or parents) could be interpreted on the assumption that lower-attainment grouped pupils have less motivation to do well for themselves and more for the teacher in comparison to higher grouped children. However, the differences among the attainment groups is not high enough to draw a general conclusion in this specific context. The claim that attainment grouping has an adverse impact could be challenged based on Campbell’s (2014) findings which suggested that schools apply attainment grouping ineffectively. Specifically, Campbell (2014) referred to the overuse of attainment grouping, in addition to the employment of less experienced teachers or teaching assistants for lower-attainment groups. The school under study, however, only grouped homogeneously in mathematics and English. Tables were also not explicitly labelled which reflects the teacher’s mindset to be flexible rather than fixed. From the interview data pupils were not generally aware of why they had been seated in certain table groups and the assumption was made that “we need to help each other; certain people can help each other and because the teacher can help us as well”, student X. The phrase “certain people can help each other” could be an indicator that certain attainment grouped pupils can help. This, however, cannot be said for certain and further research could either confirm or disprove the claim.
CULLETON: CHILDREN’S LEARNING BEHAVIOUR WHEN GROUPED BY ATTAINMENT: INVESTIGATING A PLANNED BEHAVIOUR APPROACH

**Figure 3: Comparison of social norm (pupils’ desire to avoid incompetence; to be the best at your table; for whom to work/do well; wanting to maintain in homogenous seating and the need/ability to help others)**

**Attitudes**

Pupils in lower-attainment groups find learning challenging mathematical approaches less enjoyable, less useful and do not value it as high as higher-attainment grouped children (figure 4). Their need to get everything right is also slightly higher but not significantly. Ireson and Hallam (2001) would suggest this to be because pupils attribute success to be contained in parameters, as tasks are perceived to be of a lower level of challenge. From this perspective pupils develop a frame of reference which Hallam, Ireson and Davies, (2002) describe as the “pecking order”. Arguably, Kutnick et al. (2006) would interpret the findings as the lack of opportunity for lower-attainment grouped pupils to engage in meaningful work. This perspective can be in part dismissed as the school allows pupils to choose their own challenge. Pupil mentioned that “it does not matter if they have a higher chilli than me because I have been put onto a level because the other chilli would be too challenging in a higher spice (challenged).” said by student X. However, the words “put onto” indicates some teachers’ involvement and “other chilli would be too challenging in a higher spice” could be interpreted through Hallam, Ireson and Davies’ (2002) description of the “pecking order”. When asking pupils if they find the chilies useful, they agree “I think they are useful because they help us choose, because you would not know what sheet to get and it helps you to choose how much you want to challenge yourself”, said by student X. Pupils seem to enjoy mathematics more when doing the last question, a reasoning question at their level of challenge or a higher challenge. This could mean that those types of questions are most enjoyable for the students or an indication that they are able to do what is perceived as the hardest question.
**Perceived behavioural control**

PBC was measured by assessing pupils’ self-perceived obstacles in attempting a more challenging mathematical questions (fluency, word-problem and reasoning questions). The survey also measured their perceived resilience when faced with a difficult task and if they felt they were adequately challenged. The results are consistent with previous findings, showing that lower-attainment grouped children appear to be less confident in attempting higher challenging questions. In addition, these pupils were perceived to have lower resilience to continue with something difficult. The difficulties can be interpreted as perceived obstacles in their own abilities, with students feeling they are less able to perform when grouped lower (figure 5). These findings can be interpreted through Boaler’s (2008) research which found that lower-attainment grouped students perceive the expectations to be lower while higher-attainment grouped pupils feel that expectations are too high. In the school under study, however, students could have chosen their own task and therefore it is interesting to find mid-attainment grouped pupils expressing the view that they could have attempted a more challenging worksheet in most lessons. This could be explained by pupils’ confidence in challenging themselves more (figure 1), which is part of the school’s culture and their higher drive to remain resilient. Pupils also find reasoning questions “tricky and fun” which could also explain why students want to challenge themselves more. For a teacher this would suggest to use more reasoning questions, even at the beginning of lessons as students seem to enjoy them the most. Furthermore, this may help lower-attainment grouped students to overcome their self-perceived obstacles as they are able to complete what is known as a harder question.
Figure 5: Comparison of perceived control (pupils’ confidence to complete more challenging tasks and their perceived confidence to remain resilient)

Limitations
The results indicate that pupils’ perceived learning behaviour differs in each group. It can also be inferred that each variable in the planned behaviour framework links with others, providing a picture of the students’ learning behaviour. No statistical evidence can be provided for this due to the small sample size. This also means that no broad generalisation can be inferred but rather an indication of what a larger scale project could look like. While exogenous factors have been discussed, the ability to eliminate them or hold them statistically significant was not possible due to the nature of the study. Furthermore, the objective of the study was to access students’ thinking about their proposed behaviour, which in itself is a limitation as it does not observe learning behaviour but assesses pupils’ perception. Lastly, the theory itself, used to discuss this research, addresses only one aspect of learning behaviour. Other variables such as emotions, habitual development and social-economical background have also shown to influence learning behaviour (Houwer and Hermans, 2010; Henry, 2015). Thus, further research is needed to discover further underline factors that may be influence by homogenous grouping.

Concluding discussion for practical implications
Based on the research findings, which must of course be tempered as a result of the scale of the research, it seems that a heterogeneous grouping should be implemented, as a homogenous grouping approach can be seen to adversely impact learning behaviour for some children. Reid et al., (1981 pg. 46), however, stated that “there is no one best way of organising pupils for all purposes.” Hong et al.’s (2012) research would also suggest that homogenous grouping works under certain conditions, such as providing 1-hour of intensive engagement with lower-attainment grouped children per day. Considering the class sizes of 32 pupils, meeting this condition would be problematic, even when the diversity of the class is reduced through grouping.
The findings in this research support the notion that lower-attainment grouped pupils’ learning behaviour is less desirable comparatively to those in higher-attainment groups. Grouping homogeneously is still logistically advantageous and if the adult to student ratio is sufficient it may be a preferred organisational strategy. Caution should be taken, as pupils’ behavioural learning intent (their motivation) can be adversely affected for those in lower-attainment groups (figure 2) and therefore, pupils would benefit from an increase of intrinsic motivation. Taylor and Adelman (1999) ironically concluded that most teachers recognise the importance of incorporating motivational features into their teaching but find it difficult to implement appropriate strategies. Several reasons persist for these findings including the complexity of pupils’ learning behaviour as well as the large number of individuals. In my practice I will attempt to follow Sideridis’ (2005) mastery and performance-approach goal orientation teaching, in which I will present highly structured and interesting tasks, where students assume responsibility for their own learning, valuing effort and persistence and include normative evaluation where work is publicly praised and students are taught how to do better rather than highlighting weakness.

Homogeneous grouping can be used effectively when the adult to student ratio meets Hong et al.’s (2012) suggestion; but other factors also need to be considered when choosing an organisational strategy, such as the subject. In this research, homogeneous grouping in mathematics is unfavourable from a learning behaviour perspective, which further research supports (Linchevski and Kutscher, 1998; Mulkey et al., 2005). Comparatively to other subjects, findings tend to either support or disapprove of the use of within-class attainment grouping. For instance, homogeneous grouping is proposed as a more favourable method for EAL students during guided reading (Puzio and Colby, 2010; Robinson, 2008). In writing, the literature is also inconclusive, indicating that the complexity of the concept being taught is an influencing factor in the decision of which organisational method to use. Caution should be taken, as researchers have found that lower-attainment grouped pupils tend to be more involved in non-instructional activities and are less likely to be asked critical reasoning and comprehension questions in addition to being given fewer opportunities to select their own learning materials (Kutnick et al., 2005). When teaching team/group activities, attainment grouping influences the group dynamics. As seen in figure 3, pupils’ perception of their attainment to help others drops if they are grouped lower; their fear to show incompetence also increases. Teachers, when using group activities, may therefore find homogeneously grouping to be advantageous due to the higher group interaction among peers (Kutnick et al., 2005). The overuse of grouping could be at the expense of pupils’ ‘relational equity’ which is defined as treating each other with respect and responsibility (Boler, 2013). Neither can be taken as a universal truth and will depend on the class, the school’s cultures and the teaching approach. As I teacher I will therefore be careful to balance both organisational approaches.

The use of homogenous grouping should not be overused as it is too easy to label children within the classroom behind the façade of table names or renaming attainment groups differently. The choice to use homogeneous grouping should be based on the subject taught; the complexity of the concept taught; the diversity of the class and the adult to student ratio. Overall, I aim to use mixed-attainment groups unless it is instructionally advantageous. Ensuring that the focus of control remains firmly in the pupils’ grasp increasing their ownership over their learning which is crucial in developing adaptive learning characterises. As my teaching of subject knowledge may be in part forgotten over time, the habits of good learning behaviour will persist for a lifetime.

References


Martin, K. (2017)'A study assessing Year 5 pupils’ perspectives of intelligence and achievement goal orientation and how these relate to their perspective and causal explanations of success and failure' *Journal of Trainee Teacher Educational Research, Volume 8,* pp 259-292


Wilson, S. (2017) A study of Year 5 pupils’ perspectives and evaluations of their academic abilities (their academic self-concept) and how this relates to their motivational style. *Journal of Trainee Teacher Educational Research, Volume 8* pp.099-126.