

LEVEL 7 ASSESSMENT SPECIFICATION

Student name:	JAMES LLOYD BRACE	Student ID number:	1703193
Programme:	Secondary PGCE History		
Module:	Curriculum Development and Enhancement		
Module code:	ECSP7002	Contribution to Overall Module Assessment (%):	100%
Lecturer:	Helen Denny	Internal Verifier:	
Assignment Title:	Research Study including Ethics Form	Word count (or equivalent):	10.000 words in total including an Ethics form (to be given in on January 11 th 2019)
Submission deadline:	May 13 th 2019	Return date of provisional marks & written feedback:	June 10 th 2019
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 50%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Attitudes to Learning and Motivation: an action-research project

INTRODUCTION

Noting the instrumental influence learners' attitudes and motivation have on their learning in the classroom, this action research project was designed to both *identify* learners' *attitudes to learning* and how those attitudes *may change* during a lesson. This would allow the teacher-researcher to examine what learners attitudes and changes in attitude *suggest* about their learning, and what *implications* that has for teaching and learning in the classroom.

True to the action research philosophy, the project's focus and aim was generated authentically by the teacher-researcher within the context of their school. The School serves a number of communities, including areas of economic deprivation, and teaches Key Stages 3-5 to over a thousand learners. In consequence, a range of individual learners arrive each day with a variety of different attitudes and motivations as a starting point. These attitudes and motivations are not however fixed (*per se*), and whilst the School's promotion of growth mindset will be analysed separately below, learners' attitudes and motivations may shift (to varying degrees) as they interact with teachers, peers and their environments during the school day.

To investigate the significance and consequences of learners' attitudes and motivations within his own History classroom, the teacher-researcher selected two of their Year 8 classes as the basis for this action-research project.

REVIEW OF LITERATURE

Within the research literature and theory on motivation and attitudes, the deep impact and continuing legacy of Abraham Maslow's hierarchy of needs (with 1940s origins and pre-eminent up into the 1970s) is still evident. 'Post-Maslow', as Warren Kid and Gerry Czerniawski (2010, 191) phrased it, the focus has shifted towards an extrinsic

(external) and intrinsic (self) reframing of motivation and a recent interest in fixed/growth mindset. Before exploring these concepts of motivation in turn, although this is an incredibly concise overview of the field, it is important to question some assumptions.

Whilst over-generalisation of all twentieth century teaching practice would be unfair, the shift away from the 'historically dominant paradigm' that teaching produces learning to a view that 'teaching is a necessary but not sufficient condition for learning' is hugely significant (West-Burnham, 2005, 33; Petty, 2014, 52; Tough, 2016, 56-7). This (teacher to learner-centric) shift provides the context for explaining the ready uptake of Maslow's motivation hierarchy by educationalists, as a way of helping understand and support the *needs* of learners. Thus, it becomes all too easy to situate Maslow among the emergent school of humanistic psychology which (together with the cognitive school) challenged and extending thinking beyond *traditional* behaviourist theories (West-Burnham, 2005, 34; Petty, 2014, 12; Tough, 2016, 56-7). However perceiving motivation literature within the behaviourist and humanistic and cognitive dichotomies is dangerous for two main reasons: an assumed new dawn in the study of motivation; and a narrowed focus 'Post-Maslow'.

Many studies of motivation in education still engage with Maslow's hierarchy, some of these (like Kid & Czerniawski, 2010, 191) offer Maslow as the starting point for understanding motivation. Whilst this can be explained in light of the context above, and its being an early and useful psychological theory, to position Maslow as the humanistic forerunner immediately paints all previous educational thought in a uniformly desensitised behaviourist light. This obscures the aforementioned variations in teaching practice during the twentieth century, but also the fact that motivation has long been regarded as important by educationalists and others throughout history.

'Above all things we must take care that the child, who is not yet old enough to love his studies, does not come to hate them...' (Quintilian, 1920, I.i.20)

'...study depends on the good will of the student, a quality that cannot be secured by compulsion.' (Quintilian, 1920, I.iii.8)

As these extracts from the Roman educator Quintilian illustrate, although the terms of reference have changed over time, the significance of a learners' attitude has long been recognised. As Quintilian's writing posit, a teacher ought not to discourage a

learner's will to learn by forcing a subject or making it loathsome, rather learning should be engaging for the learner. Thus, in these two phrases alone, particularly the latter, one finds an Ancient Roman's repost to much later so-called behaviourist views about using punishments as an extrinsic means of motivating learning. Quintilian is far from alone in espousing non-behaviourist views of education and motivation, eighteen centuries later, a tutor at Balliol College wrote to a similar end about teaching History:

'that it is not and ought not to be this collection of dry bones. The teacher's function is to make dry bones live [...] he will rouse [the learner] to analyze, to criticize [sic], to recombine for himself.' (Smith, 1898, 178-9).

Strikingly these first and nineteenth century educators both highlight the importance of motivation through making the process engaging, an aspect that goes right to the heart of effective teaching and learning. Motivation by engagement, it will be seen, is still recognised as a powerful method of motivation by many contemporary educationalists today (West-Burnham, 2005, 41; Harris & Haydn, 2006, 322-3; Kidd & Czerniawski, 2010, 189-190; McLean, 2010, xv; Donovan *et al.*, 2015, 23-4). Past teaching practice is therefore demonstrably a *broad church*, containing a number of incredibly valuable contributions which are all too often overlooked by contemporary motivation studies. Another, potentially damaging, effect of the behaviourist and humanistic and cognitive dichotomies is that a study of motivation necessarily comprises a range of multivariate aspects. Hereto, it is important to ensure that (in James Hartley's phrasing) the baby is not thrown out with the bathwater, since reinforcement (a behaviourist cornerstone) is (in his view) 'the cardinal motivator' (Hartley, 1998, 16-8). If this seems like an abstract theoretical concern, the reality is that this has real-time implications for contemporary teaching practice. For, as Geoff Petty (2014, 22) noted, 'Sadly, much teaching [...] violates the behaviourists' findings'.

The relative emphasises posited by behaviourist, humanistic and cognitive psychologies of learning are useful, but also somewhat distracting. For whilst Petty (2014, 11) generously suggests that these three schools of psychology 'supplement' and 'overlap' with one another in practice, the three schools' focuses also act to distort and fragment a larger and more complete complex understanding of learning. Learning notoriously relies on the 'positive interaction' of 'complex variables' to be successful (West-Burnham, 2005, 34). Here one must appreciate: the different social, affective and cognitive starting points of learners (Pollard, 2010 cited in Kitson *et al.*,

2011, 120); the influence and impact (for good or ill) of classroom organisational factors and environments on learners (Hartley, 1998, 27; Tough, 2016, 12-15); and that a learner's classroom behaviour derives from "an internal struggle among mental modules with differing goals and agenda" (Pinker, 2002, 40; West-Burnham, 2005, 39). Whilst this list of variables affecting learning is far from exhaustive, the significant point for this project is that successful learning goes beyond talent/ skill, it additionally relies on a disposition, motivation and determination to learn (Kitson *et al.*, 2011, 120).

Motivation is well recognised as a crucial prerequisite factor for effective and successful learning (Reece & Walker, 2007, 76; Petty, 2014, 27-28, 52). This is essentially because when learners are motivated and engaged, the rate of their learning increases, making teaching easier and lessening off-task behaviours (Kid & Czerniawski, 2010, 189; Petty, 2014, 52). However, like the process of learning itself, motivation is 'a complicated beast' comprised of the positive interaction of multivariate factors, circumstances reflected by a diverse academic literature (Garon-Carier, 2015 and Didau & Rose, 2016 cited in Boxer, 2019). Therefore, hereto this review will now proceed to examine the three concepts introduced above (Maslow's hierarchy, extrinsic/ intrinsic motivation and growth/ fixed mindset) before analysing the implications for teaching which have only hitherto been touched on.

Originally published in 1943 and refined over subsequent decades, Maslow's (1943, 1954, 1962, 1970) conceptualisation framed human motivation in terms of desire to fulfil a hierarchical series of needs; progressing from basic (physiological) needs to need for self-actualisation once all of an individual's prior needs had been satisfied. Thus, Maslow provided the field of psychology (and a range of professions looking to that field for professional insight) a conceptual framework as a foundation for understanding human motivation. Maslow's work has been much critiqued subsequently (Geller, 1982; Neher, 1991; Trigg, 2004). However, it appears that Maslow himself was keenly aware of his theory's limitations and (as the editor of Maslow's unpublished 1966 paper [Edward Hoffman] observed) worried about the readiness with which his work was accepted as "gospel", rather than as a working scientific theory (Maslow, 1959; Maslow, 1991, 103). As contemporary reapplications of the hierarchy (Kunc, 1992; Kiel, 1999; Koltko-Rivera, 2006) and continued reference in educational literature (Reece & Walker, 2007, 76-77; Petty, 2014, 61-2)

illustrate, Abraham Maslow's hierarchy of human needs still holds *value as a framework for helping understand motivation*.

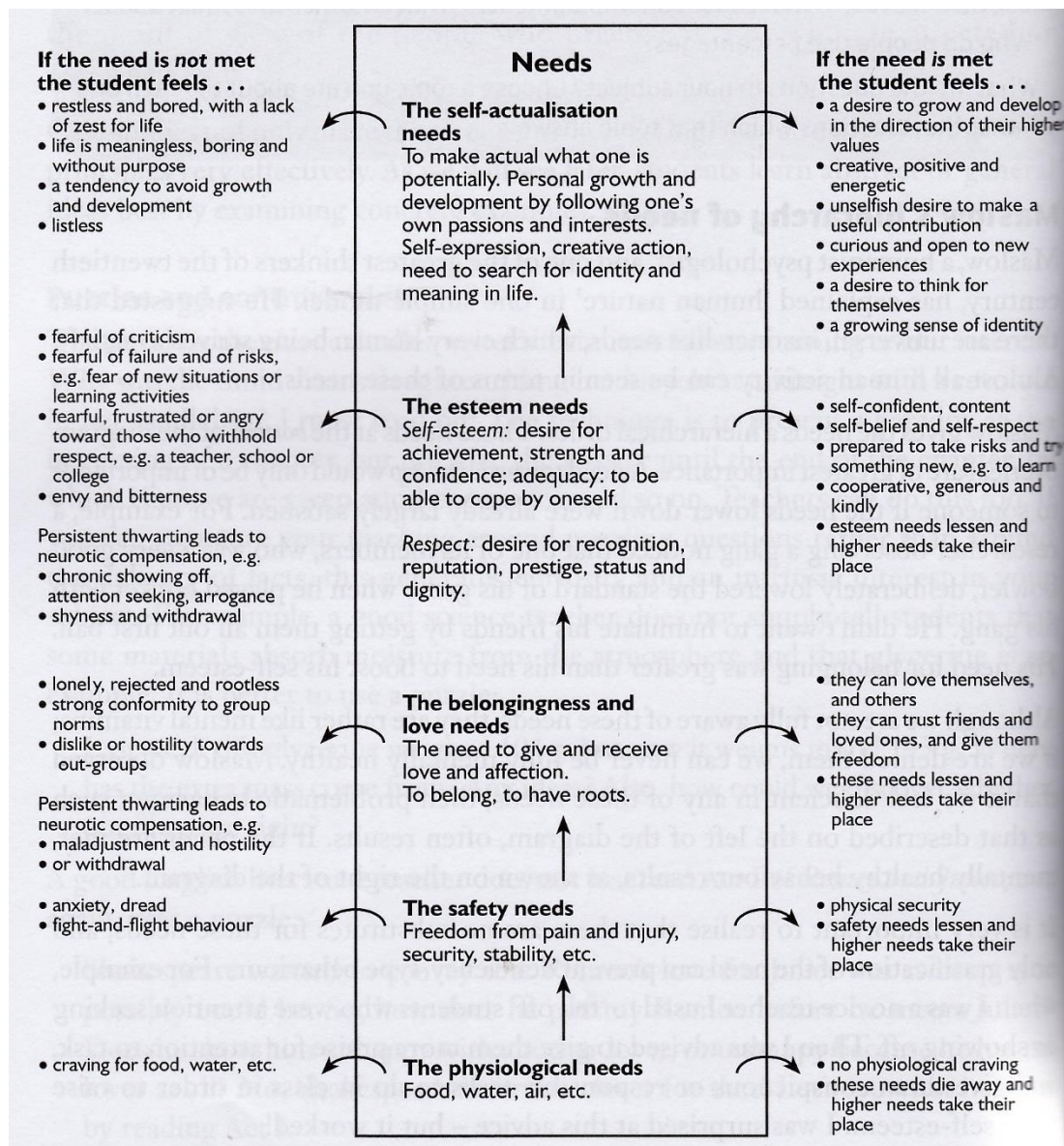


Figure 1. Maslow's hierarchy of needs, adapted for the classroom by Petty (2014, 62).

The *conceptualisation of motivation as extrinsic* (external to oneself) *and intrinsic* (self-derived) *is a highly effective means of using a holistic approach to synthesise and organise the diverse factors which influence motivation*. Returning to the earlier discussion, there is a risk of over-generalising all behaviourist principles as outdated. Whilst Paul Tough (2016, 56-7) found that external rewards are limited in their effectiveness and sometimes counter-productive in the long-term, this should not undermine the important role that reinforcement has in motivating learners (Petty, 2014, 21-22; Hartley, 1998, 17-18). The behaviourist and humanistic and cognitive

dichotomies have meant that behaviourists set the role of reinforcement (and conditioning) in motivation too highly and too exclusively, whereas other studies have been guilty of writing off reinforcement entirely as an outdated behaviourist tradition. Perhaps the better synthesis therefore, is that (and as the extrinsic/ intrinsic view enables) *reinforcement is one of the important component parts that comprise the larger and complex process* that is individual motivation.

Writing in 2010, educationalist Allan McLean (2010, xv) noted how Governmental pressure on schools was leading teachers to revert to more external reinforcement (reward and punishment) strategies. This is one of the notable side-effects of a results-driven education system and one which has a significant impact on classroom environment; environment being another external component of the motivation process. However, external components (like environment) de/motivate because of their influence upon a learner's internal decision-making. Therefore, as McLean (2010, xvi) proceeded to note: 'Teachers cannot motivate students directly but self-motivation paradoxically cannot be achieved alone and needs support.' Appreciation of the important relationship between environment (external) and self (intrinsic) motivation has also been recognised by other studies too. Such studies suggest that a establishing a positive *learning environment* in a classroom creates a climate in which learners *want to learn* and thereby *engenders* the *learning behaviours* which lead to success (Hartley, 1998, 27; Tough, 2016, 71-73; Haydn, 2017, 22). Here one can recall again Quintilian's (1920, I.iii.8) experience, that learning ultimately depends on a learner's will (intrinsic motivation) to learn, not compulsion (external reinforcement alone). Thus whilst (as McLean noted) a teacher cannot directly change a learner's motivation, (as Tough and Terry Haydn found) it is possible to create a *learning environment which develops* (among other capabilities) *a learner's motivation*.

There are a number of individual differences which affect learning (see: Hartley, 1998, 36 and Jonassen & Grabowski, 1993), but this review will conclude its literature analysis with two external components pertinent to this project (the teacher's role; and school culture) and finally some models for conceptualising motivation. The teacher's seminal role in engaging learners and establishing a learning environment have already been established, but far from being seen as exceptional practice for successful teaching, it is a core part of a contemporary teacher's role. For in addition to interrelationships generating learning and personal growth (Castle, 1971, 191;

Vygotsky cited in Phillips, 2005, 25), even a teacher's subconscious (but highly influential) behaviour modelling - the *hidden curriculum* (Petty, 2014, 27), a teacher has other responsibilities which affect learner's motivation. In Allan McLean's (2010, xvi) phrasing: 'All teachers have some kind of effect on student motivation'. In essence, it is a learner's needs, goals and purposes which provide important intrinsic motivation, however a teacher's response to (or ignorance of) these (in lesson planning, delivery and interactions) that will have a significant extrinsic affect on that learners' motivation to engage in the learning process (Hartley, 1998, 20). A teacher is 'responsible and accountable' for learners' 'progress and development', they ought to: go beyond data to understand their learners; set appropriate targets (plan accordingly); help learners develop both academically and socially; praise, encourage and provide specific (cognitive) feedback; and foster their independence (Castle, 1971, 198; Hartley, 1998, 19; Kitson *et al.*, 2011, 118; Hattie, 2012, 45; Petty, 2014, 21-22; Donovan *et al.*, 2015, 23-34).

Teachers, however, do not control all elements of the environment and this is where school culture becomes significant. School-wide policies can influence learner motivation. For instance, psychologist Carol Dweck's (2006) conceptualisation of a closed *fixed* (ability unchangeable) and open *growth* (ability changes with effort) *mindset* has been readily digested as the new trend in education (Busch, 2018) - including the school where this action-research was conducted. That teachers perceive attainment as a fluid and changeable entity has also been found to be crucial by several studies (Dillon & Maguire, 2007, 209; Hart *et al.*, 2004). Yet just like with Maslow's theory, Dweck's concepts of mindset have been uncritically applied with an inevitable fallout in academic and educational circles alike (Didau, 2017; Beall, 2018; Sisk *et al.*, 2018). Since her early work (Mueller & Dweck, 1998) and conceptualisation (Dweck, 2006), Dweck has since found herself countering what she calls the "false growth mindset" which has stemmed from an over-simplified misinterpretation of her original idea by schools (Gross-Loh, 2016). Whereas the teacher-researcher's School appears (perhaps thanks to the leadership team's support for developing research-informed teaching and learning practice) to have embedded Dweck's ideas successfully, the number of schools which have (like Maslow's hierarchy) uncritically implemented a misconstrued idea is truly worrying for the profession. Not only does this imply a significant gap between research and practice but, in the case of "false growth mindset", can actually be doing more to

damage and demotivating (because the praise is non-authentic) than good (Gross-Loh, 2016). A further proven external influence upon a learner's intrinsic motivation is the extent and nature of ability-grouping in a school, due to the affect upon self-esteem, academic self-concept and emotional response to school (Ireson & Hallam, 2001, 61). For instance, the cumulative results of Judith Ireson and Susan Hallam's research, based on approximately six thousand five hundred Year 9 questionnaires, clearly indicated important differences in culture between full, partial and mixed-ability set schools and that it was mixed-ability schools had generated more positive responses to learning and school (Ireson & Hallam, 2001, 57). Jeremy Hodgen (2007, 207-9) concurs in this view, writing that despite a political consensus in favour of more setting to raise standards, there is little research support and in fact strong evidence that not only is it unlikely to work but it will exaggerate differences in attainment and social inequalities. Crucially, Hodgen (2007, 208-9) also judges the evidence of affects to learner attitudes to be more 'equivocal', stating that learners' attitudes may be influenced by a 'range of secondary factors [like teaching, curriculum and expectations] interacting with the practices of ability grouping'. It is a view which supports the general view, of successful learning as the result of a 'positive interaction' between 'complex variables' (West-Burnham, 2005, 34)

Psychologist Robert Gagné (1977, 44) defined attitudes as an internal state moderating an individual's choices of action. Attitudes are considered to have affective (emotional) components, cognitive aspects and behavioural consequences

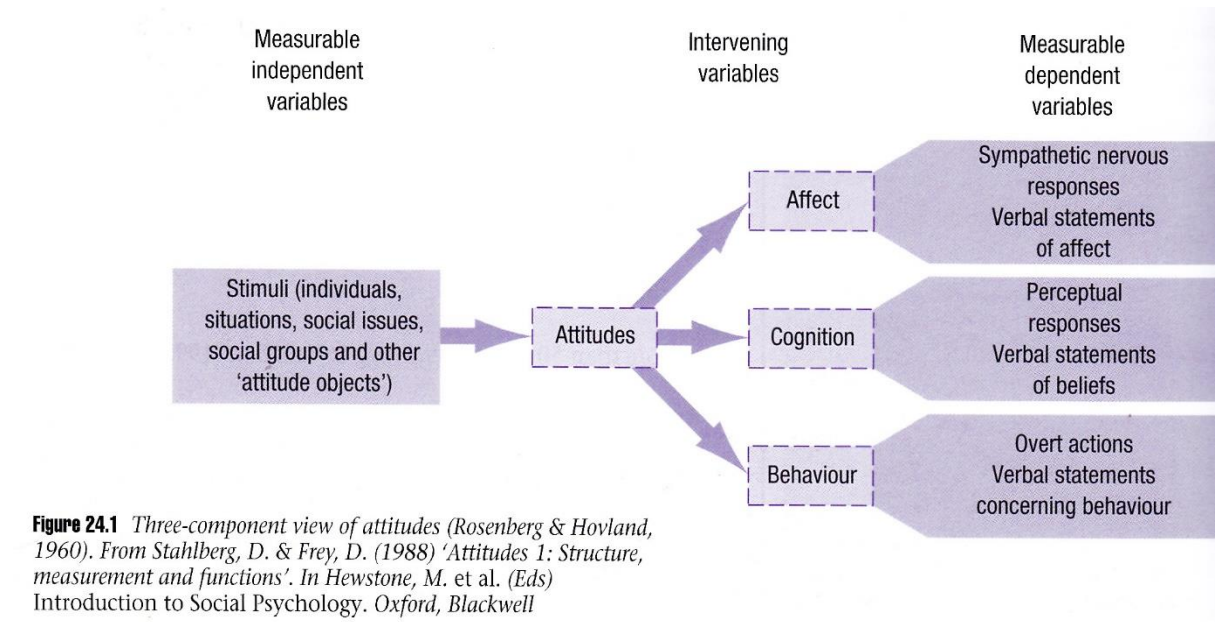


Figure 2. Psychological model of attitudes, in Gross (2005, 350).

(Rosenberg & Hovland, 1960 cited by Gross, 2005, 350 and Triandis, 1971 cited by Gagné, 1977, 44), these are illustrated above. When one takes motivation as the processes by which action is (biologically, socially, psychologically) initiated, directed, energised and sustained (adapted from the definitions of Miller, 1962, Rubin & McNeil, 1983 and Green, 1995 cited in Gross, 2005, 118), *understanding learners' attitudes becomes crucial to understanding their motivations and drives*. If teachers know how learners self-process, it will enable teachers to help learners develop the confidence, resilience, share and pride that lead to successful outcomes (Hattie, 2012, 45; Kitson *et al.*, 2011, 118; Kid & Czerniawski, 2010, 201).

Many educational theorists agree that intrinsic motivation is stronger and more effective than extrinsic motivation (West-Burnham, 2005, 34-36; Reece & Walker, 2007, 76; McLean, 2010, xv; Hattie, 2012, 47; Tough, 2016, 61-63). Yet, intrinsic motivation has also been harder to conceptualise definitively, so many theories and ideas of varying scope and emphasis exist. As a baseline, Ian Reece and Stephen Walker (2007, 76) offer four related concepts which affect a learner's motivation:

- i. Interest: leads to increased attention, work and learning quality.
- ii. Need: various, as in Maslow's hierarchy, but commonly for success & affiliation.
- iii. Attitude: emotions, feelings and enjoyment, as discussed in last paragraph.
- iv. Aspirations: intrinsic, doing for its own sake, and extrinsic motivations.

Reece and Walker's concepts are useful, and perhaps the most concise way of ordering the key internalised components of motivation, but the depth and implications within each should never be taken for granted. For instance, those learners who have experienced them, Adverse Childhood Experiences (ACEs) often have marked affects on young people's attitudes to learning, since these learners may have difficulty with motivation, self-regulation and connecting as a consequence of ACEs (Tough, 2016, 3; see also Public Health Wales, 2015, 2016). Furthermore, not only do anxiety and emotions affect learning, but they can also overpower cognitive processing and lead to the development of seemingly self-defeating behaviour (Hartley, 1998, 21; West-Burnham, 2005, 42; Tough, 2016, 13-15). ACEs and anxiety then are significant, but a non-exclusive, illustration of one of the many multivariate factors' influence on a learner's attitude and motivation.

Since the 1970s, psychologists Edward Deci and Richard Ryan have developed a self-determination theory which posits that intrinsic motivation can be facilitated by meeting three key human needs (Deci & Ryan, 2002, 7-8):

- i. Competency: feeling effective in expressing and building capacities.
- ii. Relatedness: connectedness and feelings of belonging and being respected.
- iii. Autonomy: sense of choice maximised, feelings of coercion minimised.

The extent of overlap between Deci and Ryan's (2002, 7-8) three needs and the four academic mindsets highlighted by Camille Farrington's *et al.* (2012, 28-29) review, led education writer Paul Tough (2016, 80) to synthesise their findings into two important classroom aspects (belonging and appropriate work) and two means for teachers to maximise these for learners (building relationships and effective pedagogy). Tough's synthesis also parallels McLean's (2010, xv) identification of relationship and power dimensions for influencing mindsets and therefore self-motivation. These provide a fundamental but flexible basis for, the deeper patterns and strategies (of what is otherwise a diverse field of context-specific motivation advice from individual practioners and theorists) to be identified (Tough, 2016, 7).

This for instance enables recommendations and advice about knowing and challenging learners in the classroom (Csikszentmihalyi, 2008; Allison & Tharby, 2015;

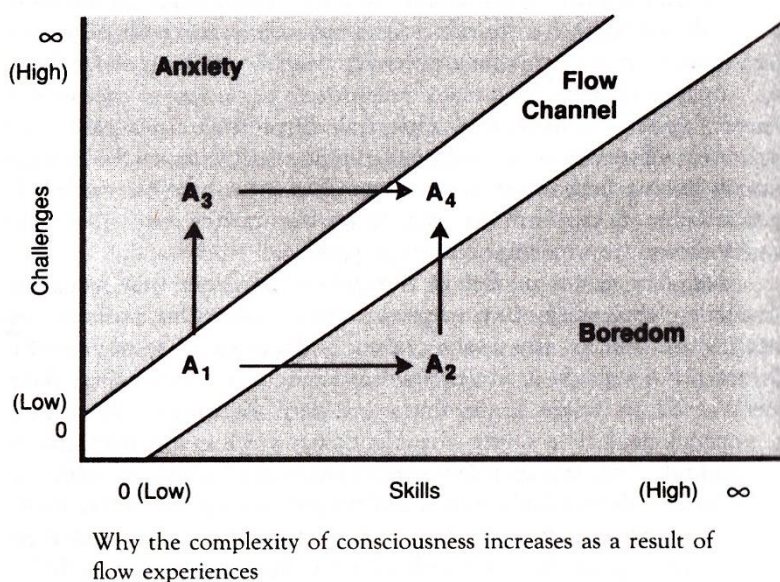


Figure 3. Csikszentmihalyi's (2008, 74) diagram showing how flow experiences lead to growth.

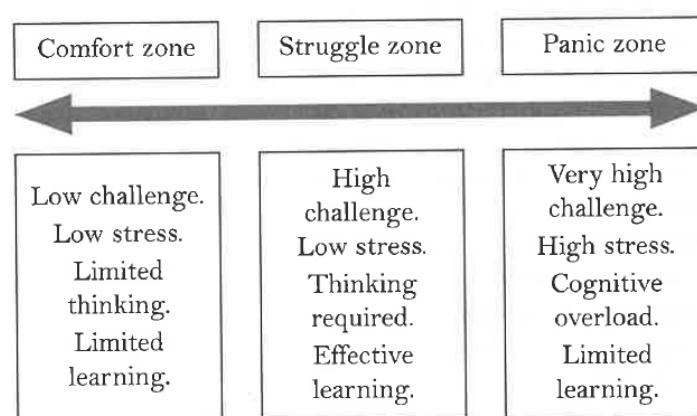


Figure 4. Allison & Tharby's (2015, 16) diagram showing three learning zones.

Kid & Czerniawski, 2010, 193-4; Boxer, 2019) works by developing learners' sense of competency, supported by appropriate pedagogical planning. Likewise, aforementioned ideas can also be situated within this relationship and pedagogy frame: engagement; meeting learner needs; creating positive learning environments; and fluid view of learner ability; reinforcement, praise, target-setting and developmental feedback.

SCHOOL POLICY AND PRACTICE

Despite its recognition as a crucial prerequisite factor for effective and successful learning (Reece & Walker, 2007, 76; Petty, 2014, 27-28, 52), it is not often that motivation features in a specific whole-school strategies or policy.

For a number of years however, the School has been working hard to develop a positive learning culture and ethos around the concept of taking pride (Headteacher, 2018). Championed by the senior leadership team, the School has set up teaching and learning research clusters focusing on different priority areas. This set-up enables the School to utilise its human resources to identify and problem-solve (through academic and action researching) authentic issues for the School. As C. Rutherford (2009, 2) and Katrina Schwartz (2018) acknowledged, finding a planning model that meshes with the School's culture is crucial as is ensuring that research-informed interventions do not become disconnected from the reality of the School's context. There are of course practical questions to be asked about whether meaningful engagement can be expected from all staff, on top of their existing responsibilities. Whilst it is not the place of this action-research project to any delve deeper into that

aspect, practical realities of interventions and costs (especially in valuable time) must be acknowledged.

In terms of motivation, one of the best and most effective things I can do, stated the Headteacher (2018), is to put creative and inspirational teachers in front of learners as passion is important. Just as this senior leader's perspective mirrors the importance of teachers and engagement to motivation and successful learning advocated by literature (Castle, 1971, 198; Hartley, 1998, 19; West-Burnham, 2005, 41; Harris & Haydn, 2006, 322-3; Kidd & Czerniawski, 2010, 189-190; McLean, 2010, xv; Kitson *et al.*, 2011, 118; Hattie, 2012, 45; Petty, 2014, 21-22; Donovan *et al.*, 2015, 23-34), there is also another clear example where a specific (research-informed) strategy has been introduced in the School: Carol Dweck's (2006) *growth mindset*.

Here, one can look to the way in which *growth mindset* has been adopted by the School. As alluded to earlier, the School appears to have integrated this successfully. Through curriculum planning, assemblies, parent evenings, posters and assessments, a strong and conscious effort has been made to embed this state of mind across the School. As the School's Headteacher (2018) expressed it, the intention is to build learners' reliance and willingness to take risks and enable them to see failure as an opportunity not a limit (see: Petty, 2014, 453-4; Tough, 2016, 75). In addition to recognising a fixed mindset as a barrier to a learner reaching their potential, the Headteacher (2018) also acknowledged that sometimes only teachers can help instil a growth mindset (see: Hartley, 1998, 27; Tough, 2016, 71-73; Haydn, 2017, 22). Whether *growth mindset* has been fully embedded into the School's culture, or one is simply witnessing the ebbing legacy of the strength of that initial launch and promotion however would be difficult to ascertain.

As a subject and discipline, History itself also affects motivation. This may seem an obvious point to make, but studies suggest that what is taught (topics), how it is taught (pedagogy) and whom it is taught (teacher) by are important determinants for level of learners' interest in History (Harris & Haydn, 2006, 321). Educationalists Richard Harris and Terry Haydn's (2006, 326) analysis of one thousand and forty learner questionnaires and one hundred and sixty focus groups found that: most learners (69.8 per cent) found History 'quite enjoyable'; and it emerged as the fifth most enjoyed subject. However, another key finding was that, while there was a 44.4 per cent range between enjoyment in different History departments, 'there was even wider

variations between some teaching groups within the same department' (Harris & Haydn, 2006, 236). It is a notable finding which fits with one earlier discussed secondary variable: the significant affect of ability grouping on learners' esteem, academic self-concept, emotional response and therefore motivation (Ireson & Hallam, 2001, 57; Hodgen, 2007, 207-9). The School is set by subject ability. Year 7 is a looser ability banding, whereas Years 8 and 9 are formally set into different classes by ability. This means that History (and other Humanities) classes are dictated by English setting.

METHODOLOGY

Traditional (academic) research and theory has dominated institutional thinking and practice in the West for centuries (McNiff & Whitehead, 2003, 19). However, this type of academic research (from above) has been challenged over the past half century by an increase in organic grassroots research (from below). The most notable research of this type is *action research*, a term attributed to Kurt Lewin's work in the 1940s (Smith, 2007). The purpose of action research (especially in the British tradition) is conducting research to evaluate and thereby enhance social practice. Action research of this sort has flourished in schools, with Stephen Corey's (1949) work being one of the earliest examples, growing into a strong tradition of action research focused on developing classroom practice (Smith, 2007). Donald Schön's (1983) concept of *reflective practice*, which is akin to action research in many respects, has also gained a solid foothold among classroom practitioners. The strength and value placed on action and reflective researches can be seen by its strong interweaving throughout the New professional standards for all school practitioners, in force from September 2019 (Welsh Government, 2018).

The intention of this action-research project was to both *identify learners' attitudes to learning* and *how those attitudes may change* during a lesson. These being analysed to investigate what attitudes and changes in attitude suggest about learning, and their implications for teaching & learning.

Great care was taken therefore to ensure that this research-project was designed to capture, store and analyse requisite learner data both effectively and ethically. Effectively, has a '*hypothetical construct*', psychologist Richard Gross (2005, 351)

points out that ‘An attitude cannot be measured directly’ and indicator is required instead. Noting the difficulties posed by researching (what is ultimately) a subjective and sometimes unconscious aspect of a learner’s processing, the research instruments and methodology for this action-research project were carefully selected. To this end, an empirical methodology, based on the collection and analysis of quantative and qualitative data, was chosen. For, although this action research has been informed by a deal of social science (largely psychology) studies and literature, an empirical rather than theoretical method was chosen to mitigate the risk of conducting a project seeking confirmation or falsification of a particular theory or belief. This was the best means that the teacher-researcher deemed possible to minimise the risk of the project suffering from confirmation bias and to reach conclusions based on the analysis of organic learner-generated data. The terms ‘mitigate’ and ‘minimise’ are used because, whilst the intention of any researcher will be to limit their views and ideas influencing their project, such is human nature. Although the methods and instruments were chosen to lessen that influence, the choice of question and form of response sought were the product of the teacher-researcher and will inevitably carry forth an (albeit reduced) element of their preconceptions to the project.

The primary instruments used to capture learner attitudes to learning, were Attitude to Learning Markers. These were vertical strips of printed paper, designed from scratch by the teacher-researcher to meet the needs of this specific project, and comprises three vertical scales to capture the quantitative attitude data and three shorter horizontal lines to capture any qualitative reasoning the learner wished to provide.

Figure 5 (right). Example of an Attitude to Learning Marker created by the teacher-researcher (actual size).

The purpose of the Attitude to Learning Markers was to provide a very simple, non-intrusive, means of learning recording their attitude at the start (first vertical line), middle (second line) and end (third line) and a brief reason for their attitude (or change in attitude) on the horizontal lines at the bottom. Learners were asked to mark each vertical line with a mark to indicate their current attitude to learning. The teacher-researcher (unavoidably as initial explanations/ reminders were needed

The diagram shows three vertical lines. The first line has tick marks at 0, 5, and 10. The second and third lines also have tick marks at 0, 5, and 10. Below each vertical line are three horizontal lines for qualitative reasoning.

in lessons) explained that: the bottom represented negative attitudes like I really cannot be bothered; indifferent and I'll just do the work type attitudes in the middle; to super excited and ready to learn at the top. As the example in Figure 5 illustrates, despite it not being the intention, three numerical values ('0', '5' and '10') were added after feedback from colleagues and learners that it was not easy to recognise which way was the right way up (and therefore the potential to dramatically scew all results). The initial idea had been that an unmarked scale would prompt a more subconscious (honest) response from a learner who was placing a mark where on the line represented their attitude. Feedback was highly valuable in that a practical change was swiftly introduced, however it cost the data capture process some of its innocence, since the introduction of numerical values made learners more meta-cognitively aware of making a specific (conscious) judgement. A final feature of the Marker was its use as an anonymous assessment for learning instrument during lessons, did not require (and provided no space for) a name to be written. Again, this anonymity was purposed to act to encourage honest attitude feedback from the learners. It was a course of action also specifically taken in light of the fact that, although the distinction was explained to learners alongside how-to fill-in the Markers, the teacher was also the researcher, a further attempt to mitigate influencing learners' responses in any way.

This last feature and the explanations presented by the teacher-researcher during the lessons were characteristic of some of the ways in which to ensure the action-research project was conducted ethically and in accordance with the key ethical guidelines of the University of Wales Trinity Saint David (2017-2020) and the British Educational Research Association (2018).

EVALUATION OF FINDINGS

To identify attitudes to learning and any changes, the teacher-researcher chose to conduct the research with two classes over three lessons each. Two Year 8 classes were chosen, a top-set and a middle-set. These decisions were taken to allow attitudes to learning in those two classes to be analysed over a period of time (three lessons not just an isolated single lesson). It also enabled the teacher-researcher to then compare and contrast findings between two classes in the same year group of approximately equivalent size and whose lessons were about fell at about same point

in the school day (lessons 2 or 3), and identify whether and where commonalities, divergences, changes in attitudes to learning occurred and for what reason.

Top-set lesson on King James I: Monday lesson 3

The first lesson of the action-research project also proved the most divergent of the six total lessons analysed. For, not only did the teacher-researcher forget to ask the class to mark their attitudes to learning at the mid-point of the lesson and to provide a reason for their attitudes, but (owing to a school trip) half the class was absent. In consequence there was not only less data collected, but the atmosphere of the lesson itself was also substantially altered from the *norm*.

As one might expect of a half-class with peers on a trip, the lesson began with expected requests to not do work or do something fun. Thus, even before entering the classroom, an external variable (peer absence) had affected the motivation of remaining learners to do normal schoolwork. The explanation that they would be doing work however, was accepted with good grace and the lesson began calmly.

The lesson itself was intended to be engaging with tasks, a Stuart family tree activity and teacher exposition of who King James I was, specifically designed to engage learners and make the lesson relevant and connected to their prior understandings. Learners responded exceptionally well to these activities, and as their engagement in a good discussion showed, relished the chance (challenge) to apply their prior knowledge and liked the style of the exposition. Despite the evolution in views of a teacher, from the behaviourist giver of knowledge to cognitive and humanistic facilitator of learning, as Harris and Haydn (2006, 323) observed it is not just pedagogy but execution that makes the teacher's role 'crucial', and "traditional" approaches like exposition and questioning can encourage enthusiasm.

Significantly, this lesson's start also supports the view of successful learning as a 'positive interaction' of 'complex variables' (West-Burnham, 2005, 34). True of the start, but also the lesson as a whole. With half the class absent, the teacher to learner ratio fell from 1:31 to 1:17 (if excluding the observing class teacher). Resultantly the dynamics of the classroom environment changed. A lower ratio meant that (practically) the teacher was able to circulate, engage with all learners and develop individual thinking (not possible with a full class), as well as adopting a more relaxed approach to classroom management and rapport with the class. The pace of the next task was

effectively monitored and altered as needed, whilst an outburst of silliness was checked calmly leading those learners to return to the task at hand.

Here and throughout, the value of a positive teacher-learner relationship was fundamental to the success of the lesson. Whilst this is difficult to postulate without the teacher-researcher sounding like they are blowing their own trumpet, the significance of a teacher planning and running a lesson which enables learners to meet Deci & Ryan's (2002, 7-8) three needs for (i) competency (applying prior knowledge, developing thinking), (ii) relatedness (relationship) and (iii) autonomy (learner-led main task, non-coercive classroom management), was clearly evident.

Whilst the data is incomplete, sufficient was collected from learners' responses on the Attitude to Learning Markers to generate the following quantitative findings from the lesson. Of seventeen learners present, fifteen complete responses (start and end attitudes marked) were collected. Fourteen learners indicated that their attitude to learning increased during the lesson, with one learner recording no change from '10'. In all the average change in attitude to learning was a 2.7 increase with a change range of 9.9 (or 4.9 if the one '0.1' to '10' result is omitted). Resultantly, the findings from the first lesson studied with top-set (Appendix 1, Graphs 1.1A and 1.1B) clearly indicate an increased attitude to learning during the lesson. Owing to teacher-researcher negligence, reasons were not sought on this occasion. One exception however was collected, upon their own initiative one learner alone recorded they 'liked this lesson'. Impossible though it is to generalise, this sole qualitative statement does at least indicate that the lesson was engaging for that learner and whose attitude to learning rose from '5' at the start of the lesson to '9.5' at the end.

Top-set lesson on King Charles I (part 2): Monday lesson 3

McLean's (2010, xvi) belief, that the teacher-student relationship should evolve as teacher responds effectively to class changes and 'critical events', was clearly seen in the first studied lesson with the top-set, but its importance was also to be seen in the next lesson studied. In the lesson after the first but before the this, two learners had begun a reading-habits task that forms part of an effort to make approaches to literacy across the whole school. The next lesson studies continued with that task. However, unlike the first lesson studied, the class was now back to full numbers and the

flexibility in adapting to class changes demonstrated by the teacher-researcher in the first lesson studied, now fell short of the mark.

On this occasion the Post-It Note true or false quiz starter, again intended to engage and apply prior knowledge, was too well received with increasing high spirits incited as the quiz progressed. This set the tone for the rest of the lesson, and despite an orderly start and pace at the beginning, the main task suffered this time from a lack of effective pace and ineffective classroom management of behavioural (noise) expectations. However, consolidating learning through seeking answers from most learners, bio-poem plenary and extension tasks acted to re-engage learners through providing creative and challenging opportunities to apply their knowledge.

From this lesson, twenty-two complete responses were collected including twenty-one reasons. Overall, again most learners' (17) recorded their attitudes to learning as having increased during the lesson, with 4 unchanged and 1 decrease. Here, using Reece and Walker's (2007, 76) four concepts as organisers, it has been possible to order learners stated reasons for their attitude to learning into groups. This revealed that interest and attitude were most responsible (see Appendix 3, Table 3.2) for increases in learner attitude, with eight and six citations respectively. Such interest-related reasons included: finding the subject or topic interesting (including incidentally the comment 'It got more interesting at the end'); learning more; and finding the topic engaging. Here, despite the acknowledged importance of interest as a motivator, it is difficult to suggest whether it is the content that makes a topic interesting or (as Biddulph & Adey, 2003, 3 suggest) it is the learning process (pedagogy). Similarly, analysis of attitude-related reasons suggested a positive experience, but significantly inspired by enjoyed, fun and excitement rather than interest. Markedly also, the difference between middle and end of the lesson is again highlighted: 'It got boring and then got exciting again'; 'I've been enjoying certain parts'.

However here one also finds significant nuances within groups and the class at large (see: Appendix 1, Graph 1.2B). For example, the attitude-related reasons also contain comments about how learners are conflicted, or a particular factor had over-ridden another: 'This class is fun but i'm always sad'; 'History is scary but ok'. These examples offering a reminder of the various (social, cognitive, emotional, environmental, subject) factors at play below the surface (Hartley, 1998, 21; West-Burnham, 2005, 42; Tough, 2016, 13-15). Likewise, five learners recorded tiredness

as a reason for their attitudes to learning, using Maslow's (1943, 1954, 1962, 1970) hierarchy one might infer that these learners may have been unable to concentrate on their work and learning whilst an unmet physiological need for sleep (or food and energy) was dominant.

Looking at Graph 1.2A (Appendix 1) and considering the average attitude change of a 1.8 increase for the class, it would all too easy to overlook both the sheer range of individuals' attitudes during the lesson and how differently the mid-lesson disruption affected learners (Appendix 1, Graph 1.2B). Equally, the strength of the increase in attitude trend, and range of attitudes seen in the results also masks the fact that one learner's attitude did actually decline - decreasing substantially from '6.3' to '2.0' to '1.8'. It is a sad finding, but indicative of the fact that their attitude fell during the lesson due to its being 'Incredibly hard'. Here the learner's aspiration-related reason suggests that their need for competency was not met. This example thus serves as a stark reminder to teachers to beware those who struggle in silence and risk slipping through the cracks, or even begin to spiral, if they remain unsupported.

Top-set lesson on the causes of the British Civil Wars: Tuesday lesson 2

In the final lesson studied with the top-set, whilst results again illustrated that most (11) learners' attitudes increased during the lesson (indeed the attitude change average for lesson was a 1.4 increase), significantly there are now visible an increased number of learners (5) who attitudes to learning decreased during the lesson (also 3 attitudes remained unchanged). Another key difference this lesson was that interest-related reasons now accounted for only 1 increase in attitude (because 'Lesson was okay not that interesting'). Attitude-related reasons were the largest grouping this lesson, accounting for 6 increases and 1 unchanged (see Appendix 3, Table 3.3). Attitude-related reasons mainly represented affective dispositions to particular aspects, whether: in general happiness, recorded by two learners, 'happy happy happy :)'; because of the activity, 'Highlighting is fun'; lesson as a whole, 'good but kind of boring at the end'; or even prior dispositions upon arrival, with two learners attributing their attitudes to having had Mathematics and Science respectively earlier that morning.

Inversely, whilst attitude-related reasons were now the largest grouping, the second largest (and increased since the second lesson studied) were needs-related reasons.

The correlation between the increase in needs-related reasons and decreases in attitudes is strong and is evidenced in the findings (Appendix 3, Table 3.3). Need-related and aspiration-related reasons alone were recorded by top-set learners whose attitudes to learning decreased, with 3 and 1 respectively (the other 2 learners in top-set whose attitudes decreased provided no reasons). This time, as well as tiredness (including one learner recording a 3.6 decrease with the reason 'I'm just really tired'), health also presented itself as a significant reason, with one learner's attitude dropping by 1.2 because 'I'm ill' the other by 0.1 because 'I was light headed all lesson'. Again, one sees physiological needs dominant in the learners' mind. However, the extent and affect is seen to be variable from one individual to another and per nature of their physical and mental condition.

As well as again demonstrating the range of learner attitudes within a classroom (Appendix 1, Graph 1.3B), one also sees how a range of factors interact to produce a learners' attitudes to learning. Whether from prior dispositions upon arrive (health, previous lessons), or how the individual interacted with the lesson itself. The lesson was a challenging one activity-wise, but also (being also the teacher-researcher's final lesson with class) time-wise. The affect of these classroom contexts on attitudes to learning appears to have been multivariate, as seen some learners clearly rose to the challenge and enjoyed the activities ('made it fun!!'), whilst others' attitudes fell as a result (possibly as a result of the increased cognitive load being exacerbated by physiological factors like tiredness or illness).

Middle-set lesson on King Charles I (part 1): Thursday lesson 3

As will be shown, the findings from the three lessons studied with a middle-set produced a very different profile. The first lesson studied was the start of the earlier mentioned reading-habits task and presented some unique findings of its own. Whilst, evidencing the legacy of the Carol Dweck's (2006) *growth mindset* in the School, one learner explained their increased attitude to learning with the reason: 'I feel alot more calm and resilient'. Gender also presented itself for the first and only time, for whilst data capture was anonymous, only the girls in the class were scheduled for vaccinations later in the day. These vaccinations were cited as reasons by two learners for their significant 4.9 and 7.1 respective decreases in attitude during the

lesson: 'Because Im [sic] scared for jabs!' These were also the only two safety needs-related reasons recorded by learners during in this project.

Whereas interest-related reasons were seen as a powerful motivator in top-set, interest-related reasons in middle-set accounted for more equivocal increases and decreases in attitudes. In this first studied lesson with the middle-set class, interest-related reasons were connected with 4 increases and 5 decreases of the 23 total complete responses collected. Here boredom enters the frame, cited as a reason for all 5 decreases and 1 of the increases (of '0' to '1.0' to '1.2'). Equally, overall changes in attitudes to learning were not as decisive in middle-set findings. The average change was an increase of just 0.7, reflective of the fact that whilst 12 learners recorded increases in attitude the decreases were almost as high, with 9. Here again the needs for (i) competency, (ii) relatedness and (iii) autonomy (Deci & Ryan, 2002, 7-8) are again seen, but in a different aspect.

Two further differences between comparison of this lesson with those of the top-set are that belonging need-related reasons and (positive) aspiration-related reasons are recorded (Appendix 3, Table 3.4). These two groupings reflecting learners' needs for relatedness (in the case of belonging need-related) and competency (in the case of aspiration-related). Evidence of the first is seen as a result of the teacher-researcher's (albeit unwitting) decision to shorten the reading as a class activity, in consequence not being allowed to read was cited as a reason why two learners' attitudes changed. Reasons like 'Because I wanted to read but wasn't chosen :(' are highly significant and indicative of the way in which, as Harris and Haydn (2006, 324) observed, contextual factors often influence teacher choices with wider than anticipated consequences for learning (and attitudes). It is important that all learners feel valued and that they belong in the classroom, else they run the risk of drifting towards alienation and disengagement from learning. Just as the two aspiration-related increases (because they 'did very good') reinforce the importance of competency, the belonging need-related reasons reinforces the importance of relatedness.

Middle-set lesson on King Charles I (part 2): Wednesday lesson 2

Competency however is not just about a learner being able to do the work set, for it to be meaningful and learners feeling effective in developing their capacities (Deci & Ryan, 2002, 7-8). As Shaun Allison & Andy Tharby (2015, 16) posited most learning

should be in a challenging 'Struggle Zone', and as Mihaly Csikszentmihalyi (2008, 74) judged the level of challenge should correlate with an individual's skill to stimulate flow and avoid boredom (too little challenge) or anxiety (too much challenge). Thus, when one middle-set learner in the second lesson studied recorded no change in attitude 'Because the work is easy', the concept of competency is again validated and here seen to have been unmet because the level of challenge was too low.

However, it was not this aspiration-related reason which were preminent but interest-related (8) and attitude-related (7) reasons, as Table 3.5 (Appendix 3) shows. Findings again revealed these reasons, unlike top-set, to be responsible for both increases and decreases in attitudes to learning. Whilst the range of learner attitudes was noted as significant among top-set findings and equally so for middle-set, the middle-sets findings are far more diverse and lack the strong trends of the former (Appendix 2, Graph 2.2B).

Middle-set lesson on King Charles I (part 3): Wednesday lesson 3

A change in emphasis in this final lesson studied, from the now completed reading habits task onto the creative bio-poem, appeared to have a marked affect on attitudes to learning. Considering two learners had recorded in the previous lesson that: 'I don't really like these type of lessons' and 'We were just writing stuff down it was boring'. Findings collected from the Attitude to Learning Markers this lesson now indicated a very different tone, most attitudes (16 of 26 complete responses) increased during the lesson with the average change an increase of 2 (greater than the sum of both previous lessons). This was also marked in the fact that attitude-related reasons were also the most recorded (9) and among the 6 increases in the group was a strong clear message from such reasons as: 'it got a lot more fun'; 'quite fun this time'; and 'Because I enjoyed the poem'. This shift was also attributable and facilitated by pedagogical changes and a noted difference in classroom management and therefore environment. Unlike the two previous lessons, where learner chatting and progress was ineffectively checked by the teacher-researcher, the use of a video clip to start led into a deep and meaningful discussion which engaged many and acted as a useful recap and scaffold for the bio-poem.

Equally, testament of the power of small decisions and actions making a difference, having collected a belonging need-related reason in the two previous lessons that a

learner disliked their seat, this lesson now saw a learner record that 'It is better because I move[d] seats' and an attitude increase of 5. Whilst, in final demonstration of the earlier stated ability of physiological needs to dominate until resolved, another learner recorded a staggering 8.9 increase in their attitude since 'Was tired and: not now'.

CONCLUSION

When educationalist John West-Burnham (2005, 38) warned of the implications of applying the ever-increasing empirical knowledge generated by institutions on learning, he appeared to have *struck the nail on the head*. In the course of this action research project, the teacher-researcher has twice encountered theories well-intended by their authors to help develop a particular understanding, appropriated and applied without a full appreciation of either the theory or their own school's context. It would seem this is becoming a concerning trend in the education profession, especially in this 'Post-truth' age where one needs to 'access, share and evaluate information responsibly and accurately' (Open University, 2018, 6). However, this is also reflective of the extent to which the scientific theoretical paradigm has been assumed to apply (perhaps owing the influence of psychology) to teaching and learning. As Harris and Haydn's (2006, 323) emphasis on the cruciality of execution as well as pedagogy, and the role of the teacher-researcher in the lessons analysed above, show; *teaching is not so much a science as an art*. One may know the essential principles, study the work of others and distil the best techniques, but *ultimately the interpretation and ultimate execution of this knowledge falls to the teacher*. As the literature review diagnosed, understanding motivation and attitudes to learning requires understanding a complex range of external and internal factors interacting together. Understanding this goes to the heart of understanding effective teaching and learning.

While some patterns were more discernible than others, compilation of findings in Graphs 1.1B-1.3B and 2.1B-2.3B (Appendices 1 & 2) gave an illustration of and insight into the complexities and nuances of individuals' attitudes to learning not always visible on the surface. Teachers ought to be *aware of these undercurrents, avoid losing learners in the crowd* and be *sensitive to how their decisions and actions in the classroom will affect learner attitudes*. Quintilian's (1920, I.iii.8) experience that learning relies on 'good will' not 'compulsion' still remains true. To help learners grow

and develop this action-research shows that teachers must: *establish positive classroom environments; engage learners; foster learners' intrinsic motivation; as well as meet their needs for belonging and appropriate/ relevant work* (Tough, 2016, 80).

Together the hundred and one qualitative responses indicated that *interest-related* (whether from process or topic) and *affective attitude-related were the most cited* reasons for changes in attitudes to learning, and that they *alternate in prominence depending on the type of lesson and its demands*. Needs, especially physiological, if *active tended to dominate learners' attitudes* like literature suggested (West-Burnham, 2005, 42).

However, this research also drew out strong support for the finding that there were *wide variations between different teaching groups*, likely as a result of set ability grouping (Harris & Haydn, 2006, 326). Though all but two (Charles I part 2) lessons differed and therefore the results are not fully comparable, that the two classes were studied for three lessons each means that the data collected, (whilst not infallible) is at least indicative. That *learners start lessons at different social, affective and cognitive points* (Pollard, 2010 cited in Kitson *et al.*, 2011, 120) was well evidenced across the board. What is however equally significant, is the *variation between the starting attitudes of top and middle-sets*. At least a quarter of the top-set started each of the three lessons with a positive (6-7.9) or very positive (8-10) attitude, and with a quarter negative (2-3.9) or very negative (0-1.9) only twice (Appendix 1, Graphs 1.1A-1.3A). Whereas, at least half the middle-set started all three lessons with a negative, very negative, and in one case (extremely negative [-0]) attitude to learning, only once did they begin with at least a quarter having positive or very positive attitudes (Appendix 2, Graphs 2.1A-2.3A). This is *suggestive of important differences in classroom climate* (Ireson & Hallam, 2001, 57) and *variations in factors interactions with ability grouping practices* (Hodgen, 2007, 208). Variation was also notably among qualitative responses, for whilst interest-related and attitude-related reasons only led to increases or no change in attitudes of top-set learners, middle-set learners cited these (within a small margin of difference) as reasons for increase and decrease in attitude. Likewise, whilst both classes cited physiological need-related reasons, only the middle-set's responses extended to safety need-related (vaccinations were one-off event) but also significantly belonging need-related reasons (either from teacher or peers). This difference and the finding that positive aspiration-related reasons were also

exclusively given by the middle-set, may suggest that whilst the top-sets' more positive starting attitude means that the need is more endurable, meeting needs for competency (aspiration) and relatedness (belonging) are more important when teaching the middle-set - who tend to start lessons with more negative attitudes.

It has been stated that these findings, whilst not infallible, may be seen as indicative of key influences and factors affecting the attitudes of learners during lessons.

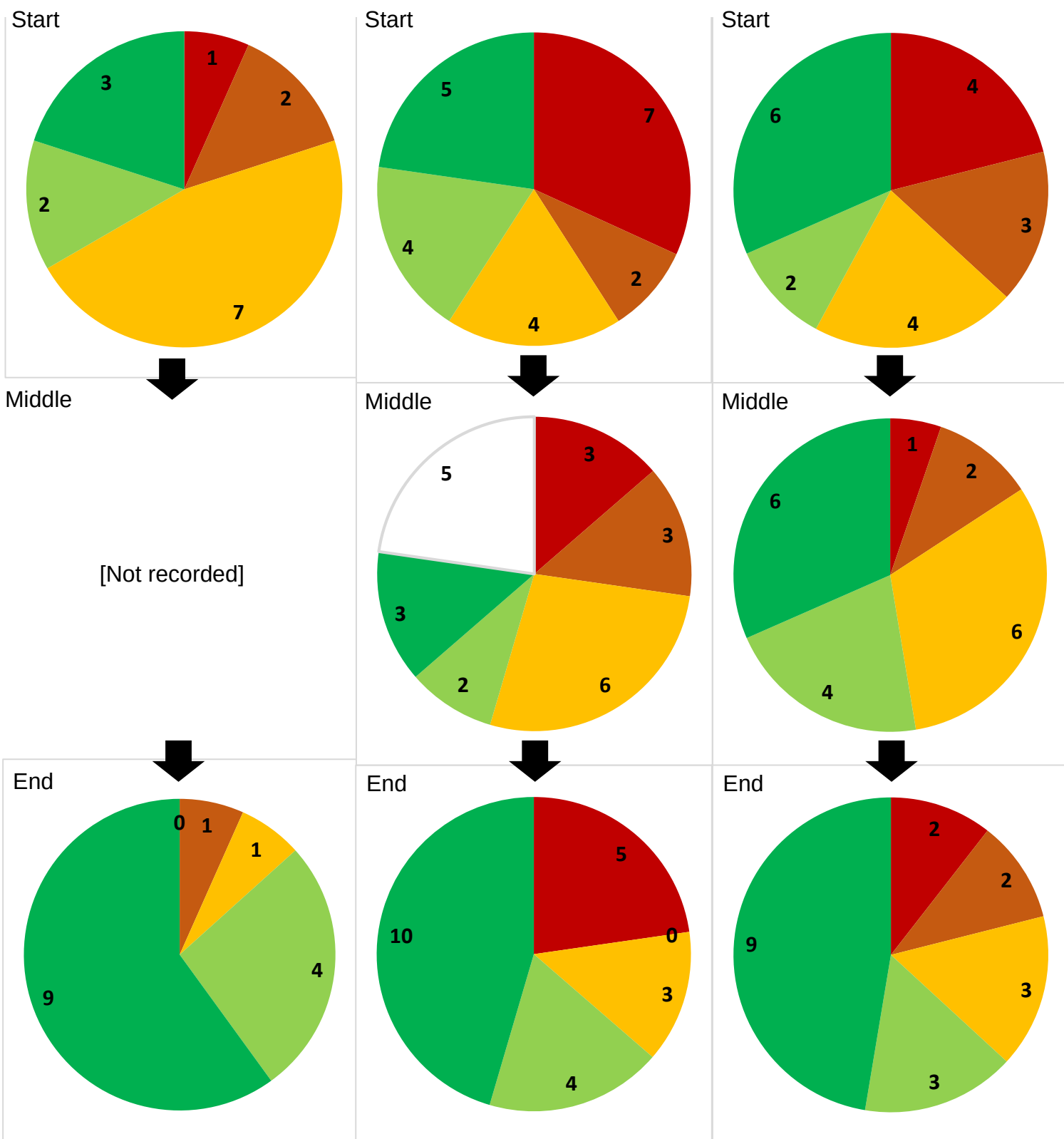
Regardless of the class taught, positive relationships (relatedness), environment, engagement, competency and autonomy and effective pedagogy is fundamental for improving learners' attitudes to learning. That process and the successful teaching that results however, can only begin when a teacher goes beyond their data and comes to know and understand their learners (Kitson *et al.*, 2011, 118).

Appendix 1: Top-set learners' attitudes to learning during lessons

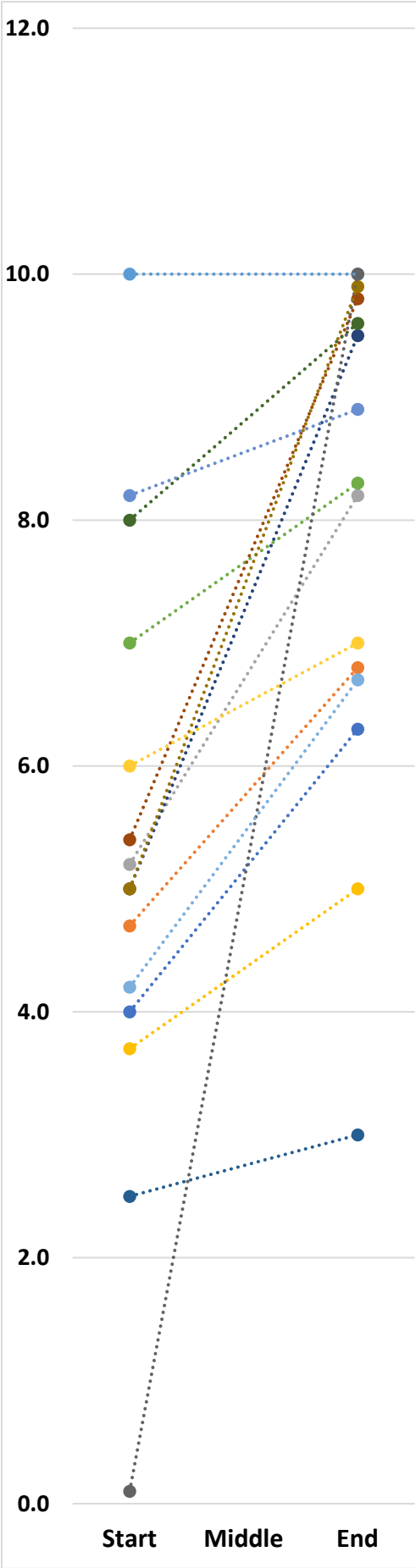
Graph 1.1A - Lesson 3, Mon.
28-01-2019 (James I)
15 responses

Graph 1.2A - Lesson 3, Mon.
11-02-2019 (Charles I Pt.2)
22 responses

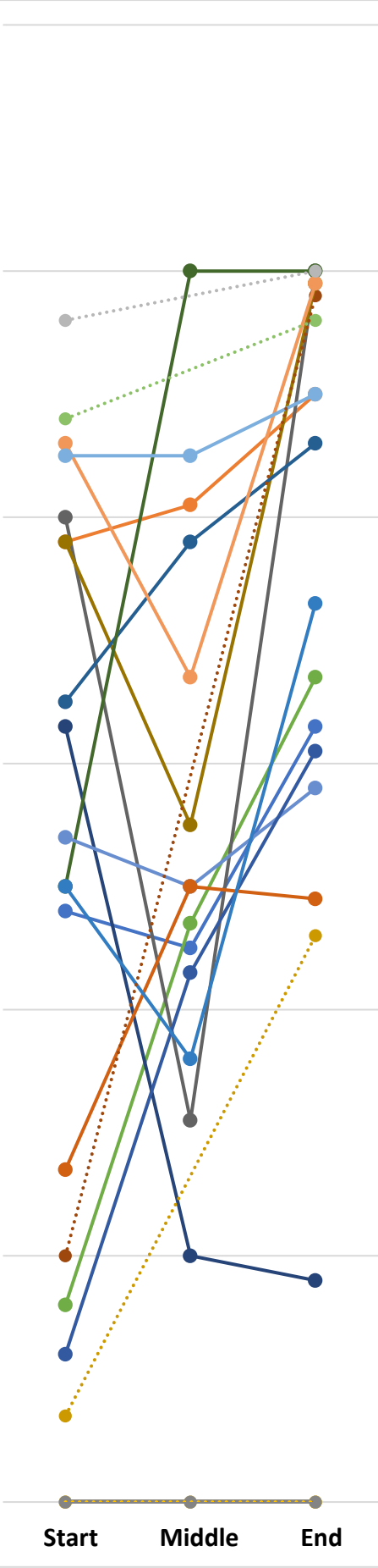
Graph 1.3A - Lesson 2, Tues.
19-02-2019 (Causes British Civil
War) - 19 responses



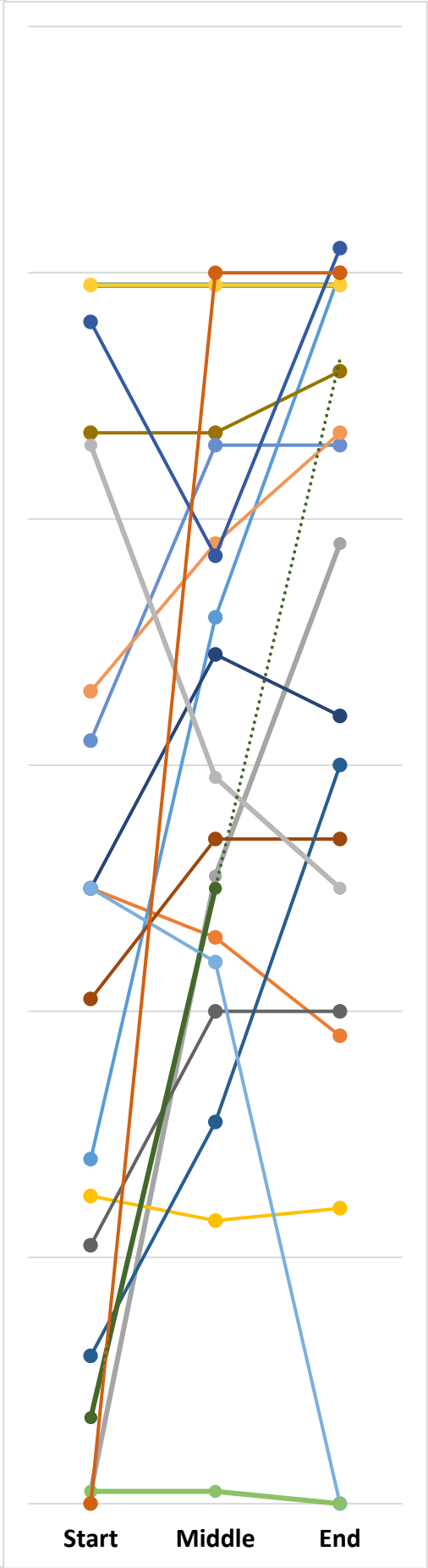
Graph 1.1B - Lesson 3, Mon.
28-01-2019 (James I)
15 responses



Graph 1.2B - Lesson 3, Mon.
11-02-2019 (Charles I Pt.2)
22 responses

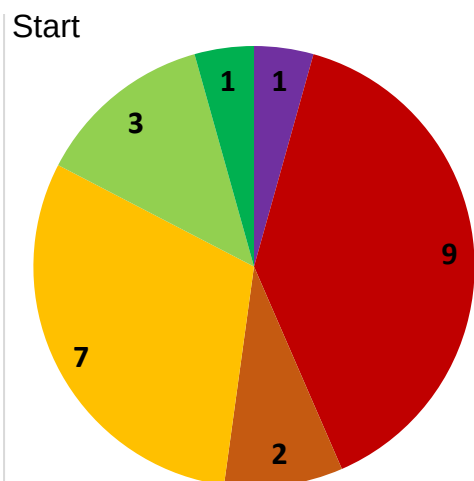


Graph 1.3B - Lesson 2, Tues.
19-02-2019 (Causes British Civil
War) - 19 responses

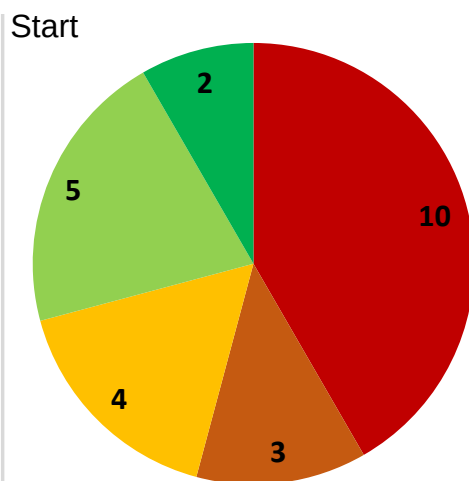


Appendix 2: Middle-set learners' attitudes to learning during lessons

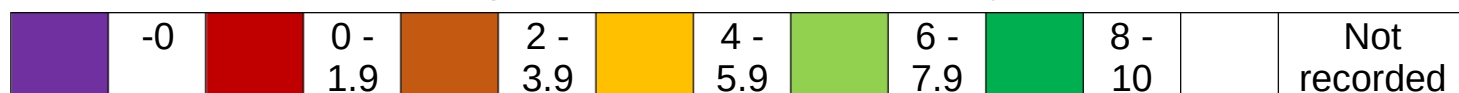
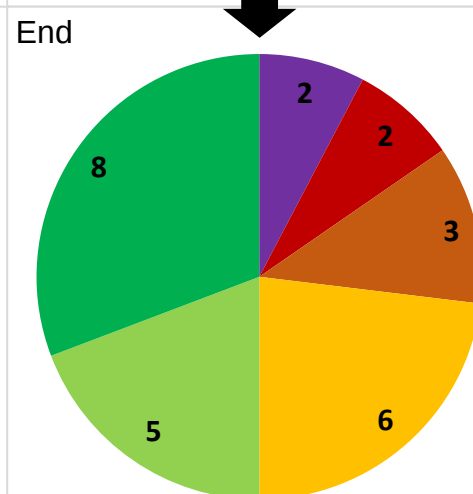
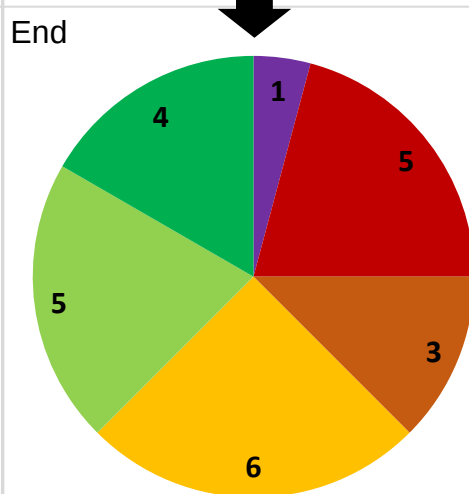
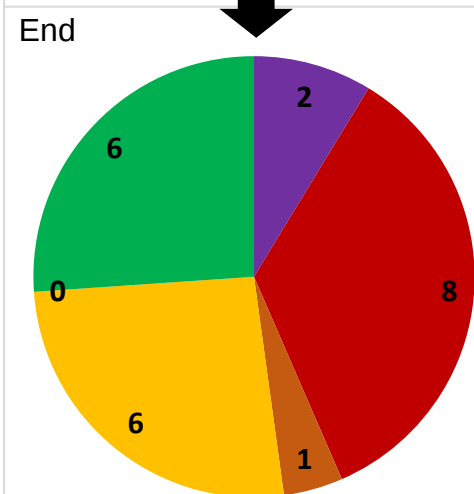
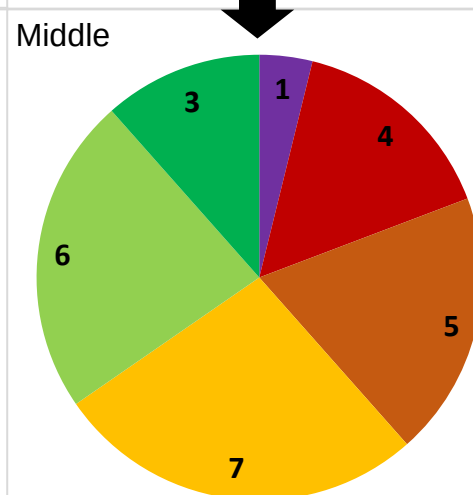
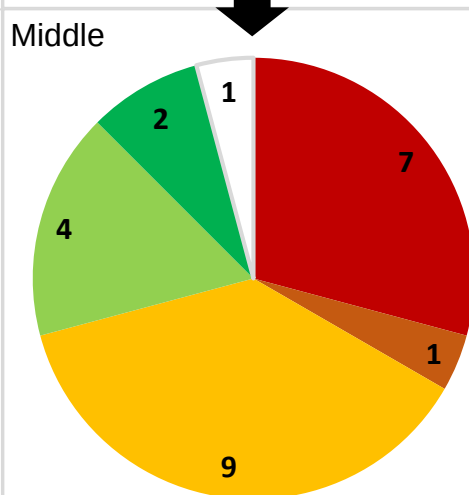
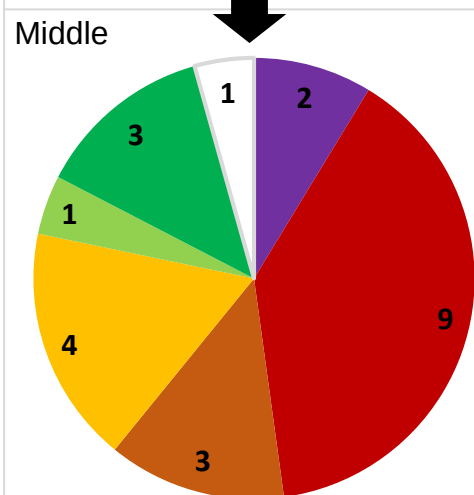
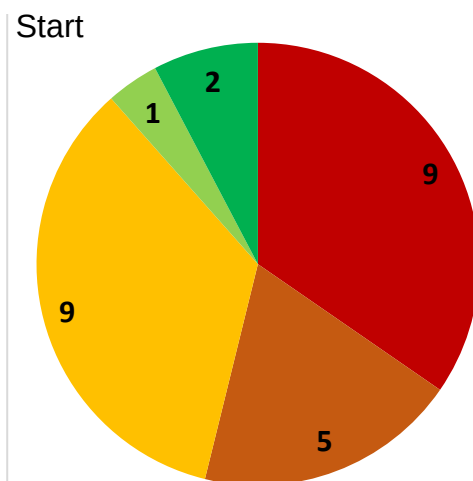
Graph 2.1A - Lesson 3, Thurs.
07-02-2019 (Charles I Pt.1)
23 responses



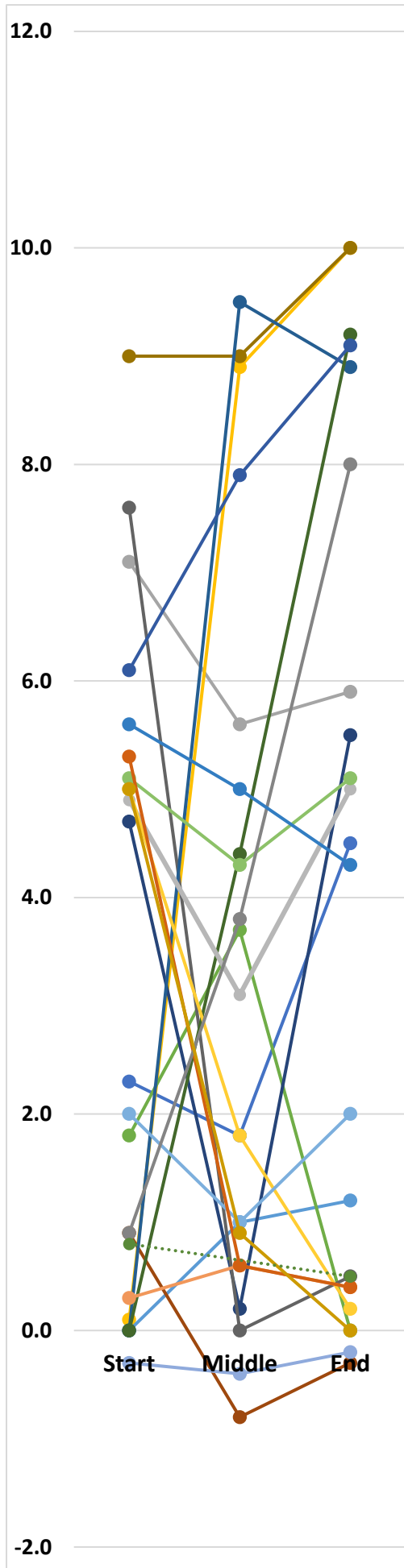
Graph 2.2A - Lesson 2, Wed.
13-02-2019 (Charles I Pt.2)
24 responses



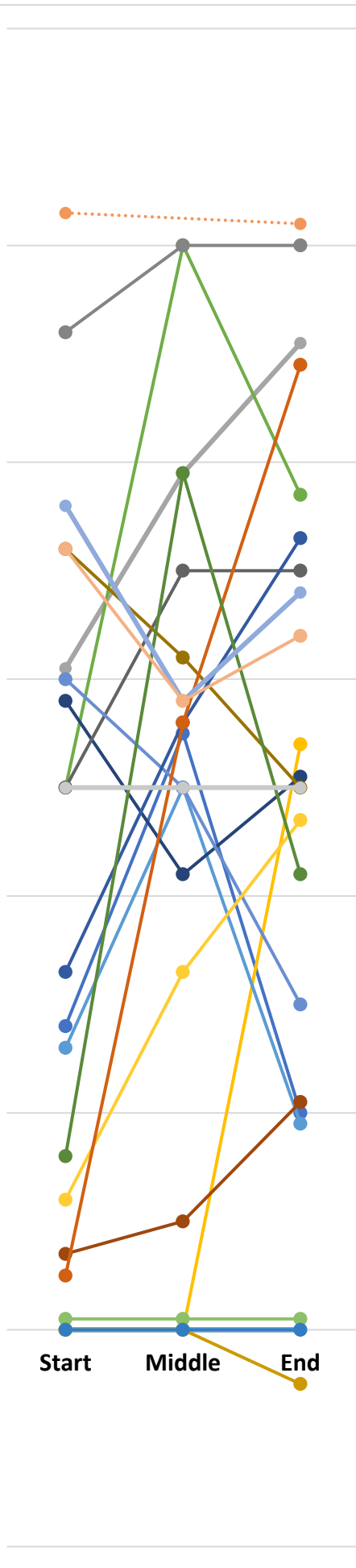
Graph 2.3A - Lesson 3, Thurs.
14-02-2019 (Charles I Pt.3)
26 responses



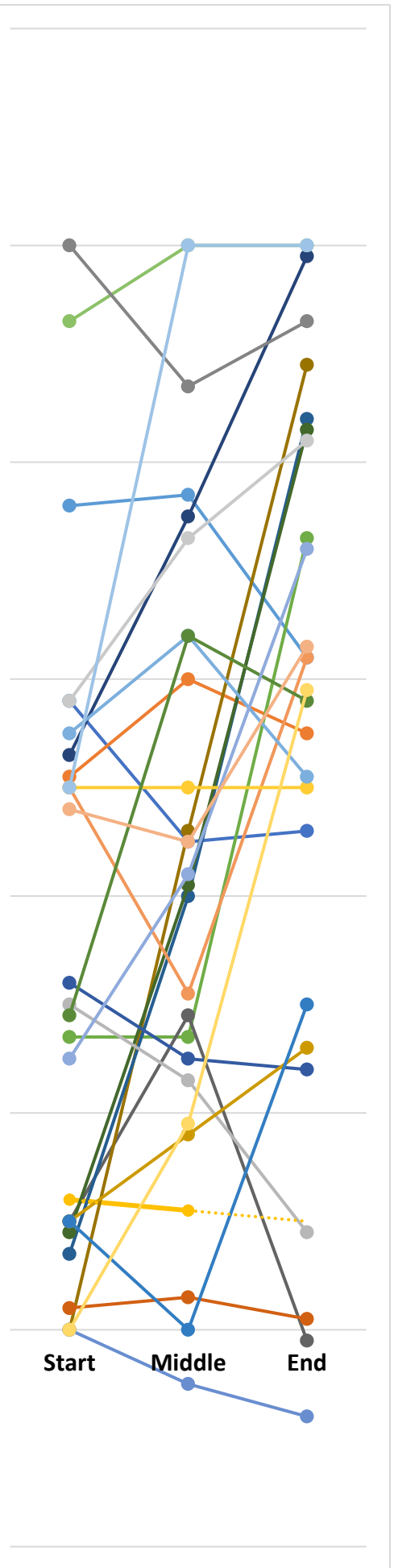
Graph 2.1B - Lesson 3, Thurs.
07-02-2019 (Charles I Pt.1)
23 responses



Graph 2.2B - Lesson 2, Wed.
13-02-2019 (Charles I Pt.2)
24 responses



Graph 2.3B - Lesson 3, Thurs.
14-02-2019 (Charles I Pt.3)
26 responses



Appendix 3: Attitude to Learning shifts by category of reason given

Table 3.1 - Top-set: Lesson 3, Mon. 28-01-2019 (James I) - 15 response

	Interest	Attitude	Need	Aspirations	Mix	Blank	Total
Increased	-	1	-	-	-	13	14 ↑
Neutral	-	-	-	-	-	1	1
Decreased	-	-	-	-	-	-	0 ↓
Total	0	1	0	0	0	14	15

Table 3.2 - Top-set: Lesson 3, Mon. 11-02-2019 (Charles I Pt.2) - 22 responses

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Increased	8	6	2	-	-	1	17 ↑
Neutral	-	1	1	-	1	1	4
Decreased	-	-	-	1	-	-	1 ↓
Total	8	7	3	1	1	2	22

Table 3.3 - Top-set: Lesson 2, Tues. 19-02-2019 (Causes British Civil War) - 19 responses

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Increased	1	6	1	-	-	3	11 ↑
Neutral	-	1	1	-	1	-	3
Decreased	-	-	3	-	-	2	5 ↓
Total	1	7	5	0	1	5	19

Table 3.4 - Middle-set: Lesson 3, Thurs. 07-02-2019 (Charles I Pt.1) - 23 responses

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Increased	4	3	2	2	1	-	12 ↑
Neutral	-	-	1	-	-	1	2
Decreased	5	-	3	1	-	-	9 ↓
Total	13	3	6	3	1	1	23

Table 3.5 - Middle-set: Lesson 2, Wed. 13-02-2019 (Charles I Pt.2) - 24 responses

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Increased	3	2	2	1	-	2	10 ↑
Neutral	1	1	1	1	-	1	5
Decreased	4	4	-	-	1	-	9 ↓
Total	8	7	3	2	1	3	24

Table 3.6 - Middle-set: Lesson 3, Thurs. 14-02-2019 (Charles I Pt.3) - 26 responses

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Increased	2	6	3	2	-	3	16 ↑
Neutral	1	-	-	-	-	-	1
Decreased	2	3	1	1	-	2	9 ↓
Total	5	9	4	3	0	5	26

Table 3.7 - Summary: Attitude to Learning by category of reason given

	Interest	Attitude	Need	Aspiration	Mix	Blank	Total
Top-set	9 ↑	13 ↑ 2	3 ↑ 2 3 ↓	1 ↓	2	24	60
Middle-set	9 ↑ 2 15 ↓	11 ↑ 1 7 ↓	7 ↑ 2 4 ↓	5 ↑ 1 2 ↓	2	16	81
Total	31	34	23	9	4	40	141

References List

- Allison, Shaun and Tharby, Andy (2015) *Making every lesson count: Six principles to support great teaching and learning*. Carmarthen: Crown House.
- Beall, Abigail (13 March 2018) 'Everyone's favourite psychology theory isn't all it's cracked up to be', *Wired* [www]. Available at: <https://www.wired.co.uk/article/growth-mindset-education-psychological-theory-children-mirage> (Accessed: 20 April 2019).
- Behaviour Management Report (n.d.) [www]. Available at: <https://behaviourmanagementreport.weebly.com/> (Accessed: 21 October 2018).
- Bennett, Tom (2015) *Managing Difficult Behaviour in Schools: A practical guide*. London: UNISON.
- Biddulph, Mary and Adey, Ken (2003) 'Perceptions v. reality: pupils' experiences of Learning in history and geography at Key Stage 4', *The Curriculum Journal*, 14(3), pp. 291-303.
- Boxer, Adam (2019) 'What is the best way to motivate students in your subject?', *Impact: Journal of Chartered College of Teaching* [www]. Available at: <https://impact.chartered.college/article/what-is-the-best-way-motivate-students-your-subject/> (Accessed: 18 March 2019).
- British Educational Research Association (2018) *Ethical Guidelines for Educational Research*, 4th edn. London: British Educational Research Association.
- Busch, Bradley (4 January 2018) 'Research every teacher should know: growth mindset', *The Guardian* [www]. Available at: <https://www.theguardian.com/teacher-network/2018/jan/04/research-every-teacher-should-know-growth-mindset> (Accessed: 20 April 2019).
- Castle, E. B. (1971) *Ancient Education and Today*. Harmondsworth: Penguin Books.
- Corey, Stephen (1949) 'Action Research, Fundamental Research, and Educational Practices', *Teachers College Record*, 50(8), pp. 509-514.
- Cowley, Sue (2007) *Getting the Buggers to Behave*, 3rd edn. London: Continuum International.
- Csikszentmihalyi, Mihaly (2008) *Flow: the psychology of optimal experience*. London: HarperPerennial.
- Deci, Edward and Ryan, Richard (2000) 'Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being', *American Psychologist*, 55(1), pp. 68-78.
- Deci, Edward and Ryan, Richard (2002) 'An Overview of Self-Determination Theory: An Organismic-Dialectical Perspective' in Deci, Edward and Ryan, Richard (eds.) *Handbook of Self-Determination Research*, Rochester: Rochester University Press.

- Didau, David (25 January 2017) 'Is growth mindset b*****s?', *David Didau: Blog* [www]. Available at: <https://learningspy.co.uk/psychology/growth-mindset-bollocks/> (Accessed: 20 April 2019).
- Dixie, Gererd (2007) *Managing your Classroom*, 2nd edn. London: Continuum International.
- Donaldson, Graham (2015) *Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales*. Cardiff: Welsh Government.
- Donovan, Judith; Henderson, Dawn; James, Pauline and Martin-Denham, Sarah (2015) 'Teaching and Learning' in Martin-Denham, Sarah (ed.) *Teaching Children & Young People with Special Educational Needs & Disabilities*. London: Sage, pp. 23-37.
- Dweck, Carol S. (2006) *Mindset: The New Psychology of Success*. New York: Random House.
- Farrington, Camille A.; Roderick, M.; Allensworth, E.; Nagaoka, J.; Keyes, T.S.; Johnson, D.W. and Beechum, N.O. (2012) *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. Chicago: University of Chicago Consortium on Chicago School Research.
- Gagné, Robert M. (1977) *The Conditions of Learning*, 3rd edn. New York: Holt, Rinehart & Winston.
- Garner, Philip (2013) 'Managing Classroom Behaviour: Adopting a positive approach' in Capel, Susan; Leask, Marilyn and Turner, Tony (eds.) *Learning to Teach in the Secondary School: A Companion to school experience*. Abingdon: Routledge, pp. 166-185.
- Geller, Leonard (1982) 'The Failure of Self-Actualization Theory: A Critique of Carl Rogers and Abraham Maslow', *Journal of Humanistic Psychology*, 22(2), pp. 56-73.
- Gross, Richard (2005) *Psychology: The Science of Mind and Behaviour*, 4th edn. London: Hodder and Stoughton Educational.
- Gross-Loh, Christine (16 December 2016) 'How Praise Became a Consolation Prize', *The Atlantic* [www]. Available at: <https://www.theatlantic.com/education/archive/2016/12/how-praise-became-a-consolation-prize/510845/> (Accessed: 20 April 2019).
- Harris, Richard and Haydn, Terry (2006), 'Pupils' enjoyment of history: what lessons can teachers learn from their pupils?', *The Curriculum Journal*, 17(4), pp. 315-333.
- Hart, S.; Dixon, A.; Drummond, M.J. and McIntyre, D. (2004) *Learning without Limits*. Maidenhead: Open University Press.
- Hartley, James (1998) *Learning and Studying: A Research Perspective*. London: Routledge.

- Hattie, John (2012) *Visible Learning for teachers: Maximising impact on learning*. Abingdon: Routledge.
- Haydn, Terry (2017) 'Secondary History: current themes' in Davies, Ian (ed.) *Debates in History Teaching*. London: Routledge, pp. 19-30
- Headteacher (13 November 2018) Ethos and Growth Mindset [Professional Studies seminar].
- Hodgen, Jeremy (2007) 'Setting, Streaming and Mixed-Ability teaching' in Dillon, Justin and Maguire, Meg (eds.) *Becoming a Teacher: Issues in Secondary Teaching*. Maidenhead: Open University Press, pp. 201-212.
- Husbands, Chris (2011) 'What do history teachers (need to) know? A framework for understanding and developing practice' in Davies, Ian (ed.) *Debates in History Teaching*. Abingdon: Routledge.
- Ireson, Judith and Hallam, Susan (2001) *Ability Grouping in Education*. London: Paul Chapman.
- Jonassen, D. H., and Grabowski, B. L. (1993) *Handbook of individual differences, learning, and instruction*. Hillsdale: Lawrence Erlbaum Associates.
- Kidd, Warren and Czerniawski, Gerry (2010) *Successful Teaching 14-19: Theory, Practice and Reflection*. London: Sage.
- Kiel, Joan M. (1999) 'Reshaping Maslow's Hierarchy of Needs to Reflect Today's Educational and Managerial Philosophies', *Journal of Instructional Psychology*, 26(3), p. 167.
- Kitson, Alison; Husbands, Chris and Steward, Susan (2011) *Teaching and Learning History 11-18: Understanding the Past*. Maidenhead: Open University Press.
- Koltko-Rivera, Mark E. (2006), 'Rediscovering the later version of Maslow's hierarchy of needs: Self-transcendence and opportunities for theory, research, and unification'. *Review of general psychology*, 10(4), pp. 302-317.
- Kunc, N. (1992) 'The need to belong: Rediscovering Maslow's hierarchy of needs' in Villa, R. A.; Thousand, J. S.; Stainback, W. & Stainback W. (eds.), *Restructuring for caring and effective education: An administrative guide to creating heterogeneous schools*. Baltimore: Paul H. Brookes, pp. 25-39.
- Lewin, Kurt (1948) *Resolving Social Conflicts: Selected Papers on Group Dynamics*. New York: Harper and Brothers.
- Maslow, Abraham H. (1943) 'A Theory of Human Motivation', *Psychological Review*, 50(4), pp. 370-96.
- Maslow, Abraham H. (1954). *Motivation and personality*. New York: Harper and Row.
- Maslow, Abraham H. (1962). *Toward a Psychology of being*. Princeton: D. Van Nostrand Company.

- Maslow, Abraham H. (1959) 'Critique of Self-Actualization. I. Some Dangers of Being-Cognition', *Journal of Individual Psychology*, 15(1): 24-32.
- Maslow, Abraham H. (1970). *Motivation and personality*. New York: Harper & Row.
- Maslow, Abraham H. (1991) 'Critique of Self-Actualization Theory', *Journal of Humanistic Education and Development*, 29(3), pp.103-108.
- McLean, Allan (2010) *The Motivated School*. London: Sage.
- McNiff, Jean and Whitehead, Jack (2003) *Action Research: Principles and Practice*, 2nd edn. London: Routledge Falmer.
- Mueller, C. M. and Dweck, C. S. (1998) 'Praise for intelligence can undermine children's motivation and performance', *Journal of Personality and Social Psychology*, 75(1), pp. 33-52.
- Muijs, Daniel and Reynolds, David (2010) *Effective Teaching: Evidence and Practice*, 3rd edn. London: Sage.
- Neher, Andrew (1991) 'Maslow's Theory of Motivation: A Critique', *Journal of Humanistic Psychology*, 31(3), pp. 89-112.
- Open University (2018) *Trends in Learning Report*. Open University.
- Petty, Geoff (2014) *Teaching Today: A Practical Guide*, 5th edn. Oxford: Oxford University Press.
- Phillips, Rob (2005) *Reflective Teaching of History, 11-18*. London: Continuum.
- Pinker, Steven (2002) *The Blank Slate: The Modern Denial of Human Nature*. London: Penguin Books.
- Public Health Wales (2016) *Adverse Childhood Experiences and their association with Mental Well-being in the Welsh adult population*. Cardiff: Public Health Wales.
- Public Health Wales (2016) *Adverse Childhood Experiences and their impact on health-harming behaviours in the Welsh adult population*. Cardiff: Public Health Wales.
- Quigley, Alex (2018) 'A teacher's hunt for evidence on... Whether motivation really matters', *TES*, 17 August, p. 16-17.
- Quintilian, Marcus Fabius (1920) *The Institutio Oratoria of Quintilian*, Vol. I. Translated from Latin by Harold Edgeworth Butler. London: William Heinemann.
- Reece, Ian and Walker, Stephen (2007) *Teaching, training & learning: A Practical Guide*. Tyne & Wear: Business Education.
- Rutherford, Camille (2009) 'Planning to change: strategic planning and comprehensive school reform', *Journal of the International Society for Educational Planning*, 18(1), pp. 1-10.
- Schön, Donald (1983) *The Reflective Practitioner: How professionals think in action*. London: Temple Smith.

- Schwartz, Katrina (6 May 2018) 'How to Plan and Implement Continuous Improvement In Schools', Mindshift [www] <https://www.kqed.org/mindshift/51115/how-to-plan-and-implement-continuous-improvement-in-schools> (date accessed: 18 December 2018).
- Sisk, V. F.; Burgoyne, A. P.; Sun, J., Butler, J. L. and Macnamara, B. N. (2018) 'To What Extent and Under Which Circumstances Are Growth Mind-Sets Important to Academic Achievement? Two Meta-Analyses', *Psychological Science*, 29(4), pp. 549-571.
- Smith, Mark K. (1996, 2001, 2007) 'Action research', *The encyclopedia of informal education* [www]. Available at: <http://infed.org/mobi/action-research/> (Accessed: 18 March 2019).
- Smith, A. L. (1898) 'The Teaching of Modern History' in Cookson, Christopher (ed.) *Essays on Secondary Education*. Oxford: Clarendon Press, pp. 177-195.
- Spence, C. H. (1898) 'The Teaching of Modern History' in Cookson, Christopher (ed.) *Essays on Secondary Education*. Oxford: Clarendon Press, pp. 161-176.
- Tough, Paul (2016) *Helping Children Succeed: What Works and Why*. London: Random House.
- Trigg, Andrew B. (2004) 'Deriving the Engel Curve: Pierre Bourdieu and the Social Critique of Maslow's Hierarchy of Needs', *Review of Social Economy*, 62(3), pp. 393-406.
- University of Wales Trinity Saint David (2017-2020) Research Ethics & Integrity Code of Practice. Available at: <https://www.uwtsd.ac.uk/research/research-ethics/> (Accessed: 22 April 2019).
- Welsh Government (31 August 2018) 'Professional Standards', Learning Wales [www] <https://learning.gov.wales/resources/collections/professional-standards?lang=en> (date accessed: 25 March 2019).
- West-Burnham, John (2005) 'Understanding Learning' in West-Burnham, John & Coates, Max (eds.) *Personalizing Learning: Transforming education for every child*. Stafford: Network Educational Press, pp. 33-47.