

School Engagement – Briefing Paper

This paper summarises learning from work done by Perth & Kinross Educational Psychology Service in collaboration with schools to improve school engagement, as one of the key Evidence 2 Success priorities. It will consider the academic knowledge about engagement that schools were supported to consider in identifying the priorities for intervening in their own contexts, as well as resultant learning about improving engagement in schools. The schools participated in action research projects in 14/15 and 15/16, with evidenced impact on areas of school engagement. A full report is available with further details about the school action research projects and tools to measure engagement, available here (INSERT LINK).

‘Academic knowledge’ about school engagement

The interactive nature of engagement

Headden and McKay (2015) conducted a meta-analysis of engagement studies, in a paper called “Motivation Matters”. According to this work, success in school is a multi-faceted concept, being affected by characteristics of the young person as well as the nature of the educational experience they receive.

For the young person, intellectual ability and content knowledge about a particular subject are mediated by other factors such as self-regulation, study skills, social and emotional skills (e.g. cooperation, respect, resilience), mindset and motivation. These characteristics interact with the educational experience, such as pedagogy and quality of teaching, and non-instructional aspects of the educational setting. Important non-instructional aspects include relationships, support to build perseverance and confidence, presence of feedback and sense of connectedness in school. In addition, meaningfully seeking pupil voice and quality of the physical school environment have been highlighted as having an impact on motivation and engagement. Furlong and Christenson (2008) echo the importance of this interaction between what the learner brings and their educational experience: “Engagement is not an attribute of the student but a state of being highly influenced by contextual factors”.

Plans to improve engagement should be based on an analysis of the above factors in the current context, i.e. considering what the young people bring in terms of skills, abilities, attitudes and knowledge as well as how these interact with teaching of the curriculum, the social and emotional environment of the school, and the physical environment. Interventions may target several of the interconnected areas and should take into account what positive changes are within the school’s circle of influence.

Motivation

Motivation is what starts, stops, directs and sustains behaviour, and influences how actively young people engage with learning and persevere in the face of difficulty. How

much young people believe they can do the work being expected of them, their sense of control over the work and understanding of the value of the task all impact on motivation. Fishbein & Ajzen (1975) outlined these key components in their 'expectancy-value theory' which states that to engage with a task individuals must value the outcome of the task as well as have an expectation that they can succeed, such that:

$$\text{Expectation of success} \times \text{Value of the goal} = \text{Motivation}$$

These things are affected by the teaching they experience, their opportunities to interact with what is being taught, and wider life experiences. Similarly, when Dunleavy and Milton (2009) asked students about learning experiences that support engagement they identified: solve real problems, engage with knowledge that matters, make a difference in the world, be respected, see how subjects are interconnected, learn from and with each other, connect with experts and expertise and experience cognitive challenge (with the latter being considered especially important to those who found learning more challenging).

Schools often try to increase engagement through the use of rewards, but caution should be applied when considering any reward protocol. Some studies have shown that "providing incentives for inputs [e.g. reading books], not outputs [e.g. getting good grades, performing well on tests] can lead to increased achievement" (Fryer 2010, as cited in "Motivation Matters"); however, seeking rewards can disregard the value of the task itself and evidence demonstrates that when rewards become expected, motivation can be undermined, in particular the intrinsic motivation required for success in school and life. External rewards also have the potential to remove ownership and responsibility from the educator and their role in attuning themselves to the needs of the learner to make learning more meaningful and intrinsically motivating. For further reading about this, see Kohn (2018) and "Motivation Matters".

Self-determination theory

Self-determination theory (Deci & Ryan, 2012) proposes that pupils' perceptions and feelings about themselves are key to motivation and engagement and are strongly influenced by universal human needs for 1) Affiliation 2) Competence and 3) Autonomy. In this way, affiliation is the need to be accepted, connected to and cared for by others; competence is the need to feel confident and effective in one's actions and autonomy refers to the need to behave in a manner congruent with one's values and interests. Consideration was given by staff involved in SEAR to school systems, processes and relationships that might enhance or decrease self-determination.

Mindset

Carol Dweck's work on mindset relates to the beliefs we hold about our own and others' abilities in any area (e.g. academic, sporting, creative) and has implications for how children might engage with learning. According to Dweck (2007), people can be described as having a fixed mindset (i.e. a view that human abilities are innate and unchangeable) or a growth mindset (i.e. a view that people have potential for growth and development). Holding a fixed mindset can lead to avoidance of effort and challenge for fear of failure as

a form of self-protection and therefore, disengaged pupils may be motivated to avoid failure. In contrast, holding a growth mindset can result in seeking challenge, a recognition that effort and flexibility is required and that learning is an interactive process. The mindsets people hold can differ for different tasks and are influenced by factors such as teacher feedback and praise.

Further risk to engagement for those with a fixed mindset is their comparison with others in judging their worth and who is 'the best'. If someone has a fixed view that they are not able in a certain curricular area, they may deliberately work below their potential as a method of self-protection. A similar risk exists for those who are continually told they are very clever, they may begin to avoid tasks that they do not think they can succeed in for fear of disrupting that view. If this is not challenged, the main goal can become to 'avoid looking stupid'- they achieve this by not putting in effort, by avoidance, by distraction- anything to take the attention away from feeling judgement of being incompetent. If not challenged, children's understanding of the nature of ability and how competent they are can become more and more entrenched. Table 1 outlines a summary of fixed and growth mindsets.

Table 1: Summary of Dweck's Fixed and Growth Mindset

Fixed	Growth
look smart at all costs (and never look stupid)	goal is to learn, not to look smart
it should come naturally (effort is a bad thing)	work hard- effort is the key
It's about me (how I judge myself and how others judge me)	it's not about me, it's about learning
Resulting in learners who: Avoid challenge, run from difficulty, avoid or gloss over mistakes	Resulting in learners who: Seek out challenge, engage deeply, learn from mistakes and improve

Parental engagement

The relationship between parental engagement and pupil engagement appears to be complex and replicable evidence-based interventions to support parental engagement are relatively limited. The Education Endowment Foundation is currently funding several projects to gather more robust evidence about "what works" in this area (see <https://educationendowmentfoundation.org.uk/> for more information).

It is a common misconception that improvements in parental attendance at school events or parent contact with school lead to improved engagement of their children. It is now well established that these indicators *do not* in themselves impact on pupil engagement but rather parental engagement with their children's learning that seems most important. Desforges, C. & Abouchaar, A (cited in Department for Education and Skills, 2003) state that "at home, good parenting" has a significant positive effect on children's achievement and adjustment, that is, shaping children's self-concept as a learner and through setting high expectations. That said, the impact of parental involvement is mediated by

characteristics of the young person themselves and actually weakens as children get older. Shute et al (2011) state that the strongest association between parental engagement and pupil achievement and engagement is found when parents encourage high aspirations and discuss school activities with their children. Fan & Williams (2010) report that the impact on intrinsic motivation is greatest when parents are given information about *how* to help at home, about their children's learning and how to give positive feedback, rather than their role being the surveillance of homework and imposing control. As noted by the Joseph Rowntree Foundation (2014) "*effective parental involvement programmes that have an impact on the attainment gap are those that focus on helping parents to use appropriate strategies to support their children's learning at home*".

Typology of engagement

Taylor and Parsons (2011) note four 'Typologies of Engagement'. These are 1. Academic (e.g. time spent doing school work, credits accrued, time spent on homework) 2. Behavioural (attendance, active part in discussions, extracurricular involvement) 3. Cognitive (perceived relevance of school to future aspirations, interest in learning) and 4. Affective (sense of belonging and connection to teachers/peers). The literature outlines that effective interventions should consider influence across these areas, rather than just focusing on those aspects which are easiest to measure, e.g. behavioural.

Application of 'academic knowledge' about engagement within PKC schools

An overview of each school project from the action research programmes of 14/15 and 15/16, deployed to address areas of specific need for each school, can be found in the appendix. Further details can be found in the full School Engagement Action Research Report.

What have we learned about intervening to promote engagement?

- **Engagement is difficult to measure**
 - Schools sourced and developed their own tools. When intervening to improve engagement, measurement needs to be well planned and as rigorous as possible. It is important to go beyond what can be easily measured, e.g. behavioural measures of engagement, and to consider what will be *meaningful*. The tools section in this paper should be helpful in this regard.
- **Making an impact on school engagement takes time**
 - Engagement is seen to be important due to its link to academic achievement and attainment. Noticing real and concrete change in engagement takes time and required sustained intervention, beyond a single round of improvement planning. Measures should be in place to track the long term impact of efforts to improve school engagement.
- **Further evidence-based practice is required to support impact**

- Areas with potential for the most impact, e.g. increasing parental engagement, can be less within schools' circle of influence and there is not yet a wide body of evidence-based practice to support efforts, although this is being addressed, e.g. by the EEF
- **A thorough, context-based needs analysis is key to impact on engagement**
 - “what works” evidence tends to be about characteristics of environments, an ethos and culture to promote engagement, rather than a package to be implemented, unless schools are targeting engagement in a particular curriculum area, e.g. reading
- **The impact of interventions to improve engagement in particular curricular areas does not necessarily generalise more widely. Effective intervention to improve engagement is likely to be multi-faceted**
 - For example paired reading leads to increased engagement with reading but it may not generalise to other areas. A change in pedagogy in one area is not enough to impact school engagement as a whole, non-instructional aspects of the school environment also need to be considered.
- **Good school engagement underpins many other current educational priorities**
 - There is a link between engagement with school and other priorities schools already working on, such as Rights Respecting Schools, Restorative Approaches, and now Closing the Attainment Gap through Pupil Equity Funding. Consideration of student engagement should form part of the needs analysis process when considering improvements related to these areas and in raising attainment in general.

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Appendix: Examples of PKC school-based interventions

Project Title	Academic knowledge	Evidence of Impact from literature	Types of engagement targeted	Principal areas targeted	Impact in context
Paired Reading as a means of engaging children in reading, raising attainment and improving attitudes to reading	Joseph Rowntree Foundation (2014) Topping (1999)	Peer tutoring +5 months/0.5	Academic Affective	Instruction/ teaching Relationships	Children reporting enjoyment of paired reading Improvement in pupil self-reports of their reading ability and enjoyment of reading. Children keen to continue Paired Reading Improvements in motivation to read through teacher observations.
Supporting learning through better relationships and enhanced knowledge about young people	Deci & Ryan (2012)	Teacher-student relationships 0.72	Affective	Connectedness Relationships Pupil voice Autonomy	Increase in young people reporting their house tutor knew them well Improvement in wider staff understanding of importance of positive pupil: staff relationships as a non-instructional support for engagement Personal support system redesigned
Relationships, fairness and engagement Staff voice re implementing restorative approaches	Hattie (2011) Restorative approaches literature	Teacher-student relationships 0.72	Affective	Relationships Connectedness Pupil voice	Greater staff confidence in using RA Merits and demerits to be tracked, also behaviour and effort grades Improvement in wider staff understanding of importance of positive pupil: staff relationships as a non-instructional support for engagement as well as student perceptions of fairness.
Staff working group on pupil engagement		Feedback +8 months/0.75	Affective Cognitive	Feedback Mindset Instruction/ teaching Relationships	Improvements in children's involvement in their learning experience. Children reported feeling more listened to with their opinions being acted upon. Improvement in wider staff understanding of key elements to support engagement.
Use of metacognitive strategies to improve engagement – the Learning Pit and Growth Mindset	Nottingham (2018)	Feedback +8 months/0.75 Metacognition and self regulation +8 months/0.69	Cognitive Academic Affective	Mindset Feedback Perseverance Instruction/ teaching Self regulation/ metacognition	Improved pupil confidence to tackle new learning.
Improving parental engagement through the FAST programme and Coupar Angus Counts	Goodall & Montgomery (2013) Epstein & Sheldon (2006) Groves & Baumber (2008) Desforges & Abouchaar (cited in Department for Education and Skills, 2003)	Parental involvement +3 months	Academic Cognitive	Parental engagement with learning	Positive evaluations from parents in terms of encouragement to do homework with their child, building relationships with school staff and encouragement for parents to be creative with their children

Note about effect sizes. Those in months refer to amount of progress made over the course of the intervention, as described by the Education Endowment Foundation. Effect sizes in decimals are as described by John Hattie, where an effect size of 0.4 or more is above average for educational research. An effect-size of 1.0 is typically associated with advancing learners' achievement by one year.