Ambition Institute

Achieve and thrive: A research-based guide to pupil motivation and engagement

Written by Steve Farndon

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About this publication

Pupil engagement with school is a growing priority for school leaders.

This comes in the context of a decline in school attendance since the Covid pandemic, and UK pupils reporting lower scores than most of their OECD counterparts on measures related to wellbeing.

The Labour government has called achieving and thriving the "two pillars" of their plans for pupils, emphasising that they are "not in opposition", but "work in tandem, one strengthening the other".

The research review that we conducted to write this paper supports this view: motivation, engagement and success are mutually reinforcing and when children are engaged with school, they get better grades, attend more frequently, and engage in fewer risky behaviours.

Our mission at Ambition Institute is to provide high quality professional development, which supports teachers and school leaders to keep getting better, so that together we can make a significant difference to the education and outcomes of the most disadvantaged children.

One way we do this is by sharing evidence-based insights. This publication will explore what academic research reveals about pupil motivation, and how meeting children's underlying psychosocial needs can help them to thrive and achieve.

Whether you are a teacher, or a school leader, we hope this publication will help you to understand more about the theory behind pupil motivation and engagement, and how you might start to put this into practice in your context.

Together, we can work towards our vision of an education system where every child can thrive, no matter what their background.

About the author

Steve is a former history teacher. He now leads Ambition Institute's pupil engagement and instructional coaching programmes. He also designs and delivers the professional development for the internal faculty at Ambition.

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Introduction

Why pupil engagement?

Pupils' experiences of education are shaped by their day-to-day interactions with teachers, peers and work.

English schools have seen significant developments over the last ten years in how they plan for pupils' interactions with their work. Growing knowledge of cognitive science has meant a move away from designing lessons that prioritise exciting activities, to a focus on pupils thinking hard about their work.

Simultaneously schools have been scaffolding interactions between staff and pupils to build calm, orderly and focused environments. This has given teachers and leaders tools to create conditions that remove barriers to pupils' learning.

What's missing?

The emphasis on these interactions – combining predictable environments with a focus on the nuts and bolts of learning – has helped many teachers, leaders and pupils. However, there is a growing sense that something is missing from this equation. Recent trends suggest concerns about pupil motivation: persistent absence and pupil disruption to lessons is increasing (Department for Education, 2024; NFER, 2024) and pupil happiness and enjoyment of school are declining (Edurio, 2024).

Many of the factors that have caused these issues lie outside of the control of schools – but that doesn't stop teachers and school leaders from asking the question: what **can** we do about this?

What we cannot do is ignore the importance of strong systems, routines and processes that clearly communicate high expectations and support pupils to think hard in lessons. Having orderly and predictable environments means that behavioural issues are pre-empted (Kern & Clemens, 2007). Clear expectations also allow pupils a framework in which they can become more self-reliant and less anxious (Ryan & Deci, 2020). These provide a vital baseline for other interactions by making school safer and more predictable.

The importance of pupil engagement

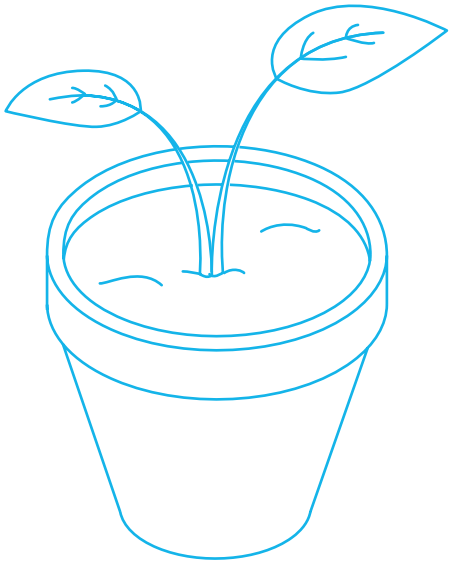
However, by thinking carefully about daily interactions we can foster pupil **engagement** with school. Engagement can be thought of as pupils' "state of connection with the school community", which operates on both a social and learning level (Wong & Liem, 2022, p.125). In lessons this involves "constructive, enthusiastic, willing, emotionally positive, and cognitively focused participation with learning activities" (Skinner & Pitzer, 2012, p.22). Engagement is important because it leads to positive outcomes for pupils: improved attainment, increased attendance, and protection against risky behaviours (Skinner et al., 2008).

Planning for interactions that generate engagement is probably more difficult than designing those that make the school environment safe and predictable. It involves school leaders deliberately making their schools a place where pupils feel valued, successful and listened to.

This is an important process, because where pupils do feel these three things – or in the language used in self-determination theory, where their needs for *relatedness, competence* and *autonomy* are met – their motivation to engage with school increases (Guay, 2021).

The goal of this publication is to support teachers and school leaders to create a learning culture that builds both academic and social engagement, or in other words, that enables children to achieve and to thrive. We know that many schools have developed successful approaches to balance both these aims, and we hope to throw some light on why these work by sharing key insights from research. These insights may also help school leaders to spot gaps in their current provision and develop solutions.

We start by analysing how schools can go beyond the safety net of whole-school rules, routines and expectations to foster pupil motivation over time. We then offer some guidelines that can support implementation.



An overview of motivation theory: beyond intrinsic and extrinsic motivation

Motivation is what we call the internal processes that support us to start and continue with effortful tasks. For example, when pupils decide to attempt some questions in a lesson, and when they choose to continue with those questions even when they are distracted or find the work difficult – this requires motivation.

The gold-standard of pupil motivation is **intrinsic motivation** – defined as pupils engaging in an activity "simply for the enjoyment and excitement it brings" (Taylor et al., 2014, p.342). Acting out of intrinsic motivation leads to a range of positive outcomes – such as improved attainment and enjoyment of school (Ryan & Deci, 2020).

Intrinsic motivation is often contrasted with **extrinsic motivation**. This is motivation that does not come from enjoyment of the activity itself, but for some other reason. Extrinsic motivation is often seen as something undesirable that should be avoided, but the picture is more complicated than that.

Teachers and school leaders often encounter pupils who are **amotivated** towards particular tasks. To be amotivated is to lack motivation or feel like you have no good reason for what you are being asked to do – similar to being apathetic or uninterested. Pupils may not see any good reason to attempt a set of questions, or to speak politely to their peers and teachers, for example.

In these situations we cannot directly change the internal processes behind a pupil's motivation (which is probably a good thing for our free will!). What we can do is put external pressure on pupils to change their immediate behaviour.

The limitations of external regulation

In self-determination theory this is called **external regulation** because the pupil's reason for acting comes from outside themselves (Guay, 2021). External regulation is a type of extrinsic motivation that often takes the form of rewards or sanctions and can be useful in tackling the symptoms of amotivation.

Relying on external regulation has limitations. Pupils will often only behave in a motivated way for as long as the external regulation is present, and if it is removed their motivation is likely to return to its original level (Niemiec & Ryan, 2009).

Motivation that comes from external regulation is also likely to be of low quality. Someone with high-quality intrinsic motivation will work harder and persist for longer than someone with lower-quality extrinsic motivation (Ryan & Deci, 2000). For example, a child who is completing a task because they are interested in the topic and keen to achieve success in the subject will produce very different work from someone who is focused on doing the bare minimum to avoid a sanction.

In short – external regulation has limitations: it can encourage pupils to sit quietly, but may not get them to listen carefully; it can incentivise pupils to attempt their homework, but may not make them think hard when doing so.

What then, is the alternative?

Internalising pupils' motivation

It is not realistic to expect that all of our pupils will develop fully intrinsic reasons for everything we ask them to do and learn about in school.

What we can do is increase the quality of pupils' extrinsic motivation over time by making it more **self-determined**. Different forms of motivation can be viewed as a continuum (see Figure 1) where pupils might begin as amotivated, but over time their motivations become more internal. The further right on the continuum that a pupil's motivation sits, the higher quality that motivation is likely to be.

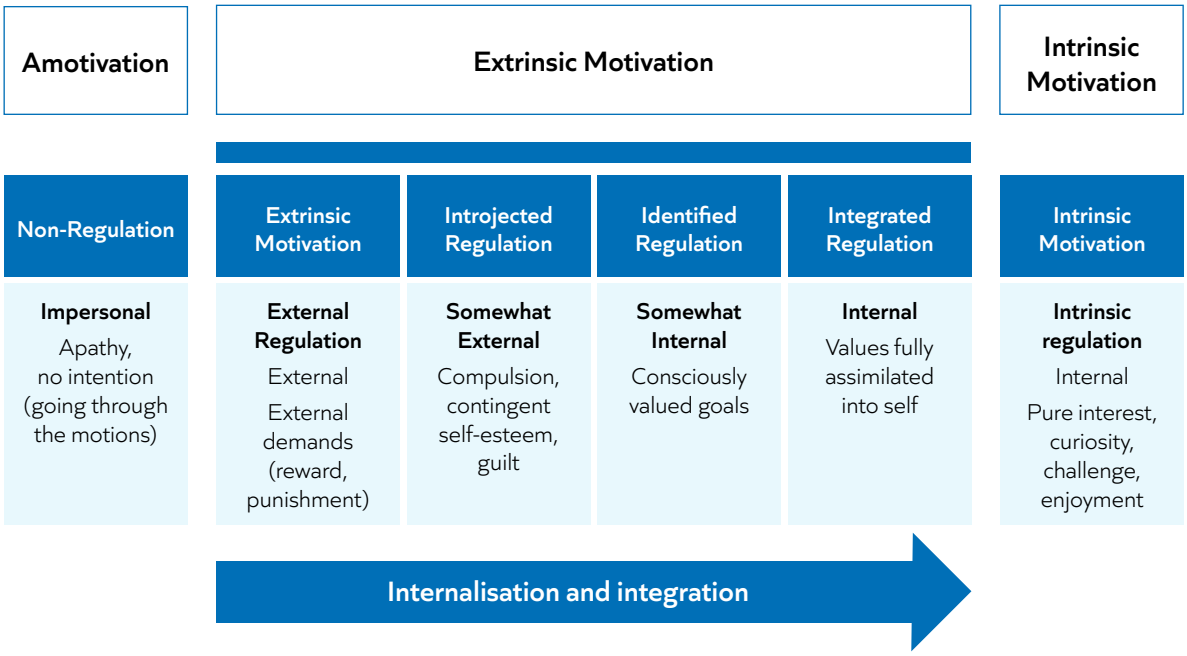
Introjected regulation is where pupils are motivated by emotional pressure from themselves or others. They don't necessarily want to do something but feel they should – for example, if a pupil picks a GCSE option because it's important to their parents but not to them. This form of motivation is of relatively low quality because the individual doesn't fully agree with their own reasons for acting, causing internal conflict.

Identified regulation is where pupils consciously value the reasons for doing something, such as the behaviours the school is asking of them (for example, 'When everyone is polite to each other it makes the school environment a nicer place to be' or 'If I work hard in maths it helps me to understand my science lessons better'). They are still not acting because of enjoyment, but they can see that what they are doing is valuable or important so their motivation is now **internal** to them.

Integrated regulation is where the sources of motivation become part of pupils' identities ('I'm proud to be a member of this school community' or 'I am a good mathematician').

Identified and **integrated** regulation have many of the same properties as intrinsic motivation, for example, pupils are more likely to start work independently and persist when things get difficult. Being motivated by identified and integrated regulation also have much wider pupil benefits such as increased pupil wellbeing and reduced anxiety (Howard et al., 2021).

Figure 1



Adapted from Ryan & Deci, 2000.

A pupil's motivation does not have to go through these stages in order. Schools can jump straight to higher-quality motivation by designing interactions that support **internalisation** and **integration** of sources of motivation.

Meeting pupils' psychosocial needs

To support pupils to internalise new sources of motivation we need to meet pupils' psychosocial needs:

- Competence – feeling like they are capable of achieving success.
- Relatedness – feeling like they belong in a community where they are valued.
- Autonomy – feeling like they have a sense of ownership and agency.

Meeting these psychosocial needs contributes to improving the quality of pupil motivation in different and powerful ways.

What might this look like in practice?

To help pupils develop competence, teachers might pre-empt likely misconceptions or gaps in knowledge, then prepare how they will respond to pupils when they observe these barriers to understanding in the classroom. To develop relatedness, they might draw attention to what pupils have in common with each other and demonstrate how a collaborative environment benefits all of them. To develop autonomy, they might concentrate on explaining the good reasons behind what they are asking pupils to do.

Insights

This section offers some insights from research that we hope will be helpful to school leaders thinking hard about pupil motivation and engagement. These are designed to act as principles that can underpin teachers' and school leaders' decision making about how to apply these ideas in their context.

01
Schools and classrooms need to be safe, predictable environments

A school environment with predictable, consistent expectations is vital.

Consistent expectations give pupils guidance about how to interact, how to be successful and how to gain more independence, supporting them to internalise motivation over time (Ryan & Deci, 2020).

> **Implication 1.1**
> Clear, upfront expectations about behaviour and learning make it easier for pupils to do the right thing.

Pianta et al. (2012, p.374) give guidance about how expectations can be established and maintained:

a. Providing clear and consistent behavioural expectations
b. Monitoring the classroom for potential problems and proactively preventing problems rather than being reactive
c. Efficiently redirecting minor misbehaviour before it escalates
d. Using positive, proactive strategies such as praising positive behaviour rather than calling attention to misbehaviour
e. Spending a minimal amount of time on behaviour management issues

The success of these steps is dependent upon the quality and consistency of these expectations across teachers and classrooms. Their implementation can be supported by turning them into whole-school routines.

> **Implication 1.2**
> Where specific expectations of behaviour and conduct are shared by all teachers and pupils they have a multiplier effect, because pupils know what to expect in every classroom.

Consistently seeing and experiencing a calm and predictable environment helps pupils to see that clear expectations make their life at school better. This in turn helps pupils to internalise the value of the rules. This improves the quality of pupil behaviour and reduces the need for schools to use external regulation to enforce expectations (Assor et al., 2017; Aelterman et al., 2019).

There is a range of established guidance about how to achieve this (EEF, 2021; Bennett, 2017) which covers these approaches in more detail.

02
External regulation acts as a safety net

Motivation that comes from external regulation (such as rules, routines and rewards) is generally of lower quality than motivation from more internal sources (Howard et al., 2021). This poses a question about the role of external regulation in school.

We can view it as a safety net. Many pupils are likely to become amotivated at some point in their school career and benefit from external support to get back on track. This might be small-scale support related to their motivation for learning, such as a phone-call home to reinforce the importance of completing all homework. On a larger scale external regulation is particularly important in setting and reinforcing behavioural norms, such as teachers being on duty during breaktimes to remind pupils of how to interact positively with each other.

Reinforcing expectations about behaviour helps to support pupils' sense of safety. Where pupils feel unsafe – if they experience bullying for example – this can undermine their sense of belonging in schools (Goldweber et al., 2013) and pupils' long-term wellbeing (Rigby, 2003).

External regulation has a role to play here. It communicates to the school community their shared norms and what will happen if someone breaches those norms – for example, schools often reserve the most serious sanctions for pupils who are violent to their peers. External regulation also supports the creation of a positive and productive learning environment through proactively sharing clear expectations of behaviour. For example, some schools specify different 'learning modes' in their classrooms that precisely define what is expected of pupils at key moments.

> **Implication 2.1**
> An important role for external regulation is that it provides an ongoing message about what the school community will and won't accept.

While a safety net is vital to reduce harm in the school environment, an overreliance on external regulation can backfire. This is especially true for pupils' motivation to learn. Where pupils are developing more internal motivation, focusing on external regulation undermines this process and does not benefit their academic outcomes in school (Howard et al., 2021). Predictable, tangible rewards, such as merits, can also reduce intrinsic motivation over time (Deci & Ryan, 1999).

What schools can do instead is identify and support pupils' growing internal motivations by meeting their psychosocial needs.

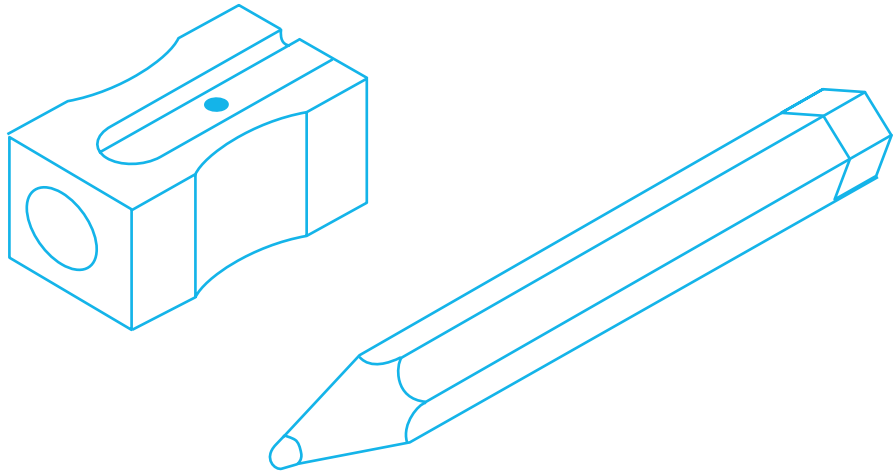
> **Implication 2.2**
> Pupils benefit when schools plan to reduce the need for external regulation and replace it with more internalised motivation.

What might this look like in practice?

If pupils are feeling positive about writing an essay and we offer merits for completing a certain number of paragraphs, we are sending some unhelpful messages. Firstly, that the task lacks value and that pupils would only want to complete it for a reward. Secondly, that we care more about the quantity of work than the level of thought pupils put in. This creates conflict between the message inadvertently given by the external regulation ('This task is boring and you just need to get it finished') and the pupils' internal motivation ('I'm excited to show what I can do in response to this essay'). This can lead pupils to lower their level of work to the expectation set by the external regulation.

In contrast, we could try and understand pupils' existing motivation about the task and reinforce this. For example:

- 'This essay is a great chance for you to show off what you've learned and how far you've come in your understanding of this topic.'
- 'I want to know what you think – I'm looking forward to reading your conclusions about this topic.'
- 'Writing essays in class is good practice and will make you feel better prepared for your exam.'



03
Internalisation and integration rely on meeting children's psychosocial needs

Our goal is to support pupils to internalise sources of motivation, but this is not a switch that we can flick – it is something that is fostered gradually over time.

The process of internalisation and integration is supported by meeting pupils' psychosocial needs: competence, relatedness and autonomy (Bureau et al., 2021). These are defined by Ryan and Deci as follows: "Autonomy concerns a sense of initiative and ownership in one's actions… Competence concerns the feeling of mastery, a sense that one can succeed and grow… relatedness concerns a sense of belonging and connection" (2020, p.1).

> **Implication 3.1**
> We can foster pupils' motivation over time by meeting their psychosocial needs.

The same holds true for all human beings: teachers and leaders have the same three needs, and how these are supported by their work environment influences their motivation and enjoyment.

We will discuss each need in more detail in the following chapters.

What might this look like in practice?

If we have a pupil who is failing to complete their homework, we might start by using external regulation – clearly communicating that if they do not complete the task then the consequence of this choice will be a detention. To make this motivation more internal over time we could focus on meeting their psychosocial needs by being intentional in our interactions:

- Competence: we could focus on pitching the difficulty of the homework to increase the likelihood that the pupil experiences success. We could also design tasks so that success in homework supports success in lessons, boosting its value.
- Relatedness: when the pupil completes their first homework we could celebrate their similarity and belonging with the rest of the class who are doing the same, for example 'What a team, 100% of the class completed their homework this week!'
- Autonomy: we could give and reinforce clear reasons for the importance of homework – how engaging in homework will 'interrupt' forgetting and make learning easier in the future. As the pupil starts to see this effect over time on their competence, this will help them to appreciate that homework is useful and helpful, even if it isn't always enjoyable.

By combining the three psychosocial needs over time, the pupil can internalise reasons for completing homework that are important to them.

04
Competence: calibrated challenge builds motivation

By experiencing success in work they find challenging, pupils feel like school is a place where they can grow and develop, improving the quality of their motivation.

Pupils make judgements about whether to attempt a task based on whether they think they can be successful in it. We can therefore encourage them to attempt tasks by increasing their belief in their ability to be successful.

The most powerful way of doing this is to enable pupils to experience success (Usher & Pajares, 2008). Elements of effective teaching that support this are:

- Avoiding early failure
- Providing mastery experiences (Kleppang et al., 2023; Bandura, 1997)

When pupils try something new and struggle in their first attempts, this can lower their belief that they can be successful in the future. This is why modelling, guided practice and checking for understanding are so vital.

Avoiding early failure is not enough to foster pupils' sense of competence alone. They also need to be provided with mastery experiences (Kleppang et al., 2023). These are opportunities to engage in meaningful, challenging tasks where success is not guaranteed – but which pupils can eventually achieve.

> **Implication 4.1**
> To build competence, teachers need to combine scaffolding of initial learning with working towards meaningful, challenging tasks.

By rising to the challenge of demanding work, pupils' competence is enhanced. This is especially important if pupils have not experienced challenging work in the past (Fredericks et al., 2004; Gregory et al., 2013).

> **Implication 4.2**
> Teachers should regularly check their assumptions about the level of work pupils can cope with and identify opportunities to really challenge them.

Trying to ensure that every pupil in a large class experiences calibrated challenge is one of the hardest tasks facing any teacher. We can support teachers' development in this area using lessons from cognitive science (for more detailed guidance see Mccrea, 2018).

05
Relatedness: feeling seen, known and valued fosters belonging

The psychosocial need of relatedness involves pupils feeling seen, known and valued as individuals. Are they greeted by name? Do teachers know their interests outside school? Are their contributions to the school community encouraged and recognised?

This is relatively easy in small schools and/or where teachers spend a lot of time with the same group of children, but much harder in large schools where some children feel lost in the crowd.

Relatedness helps people to internalise group norms and expectations (Guay, 2021). Strong relationships with teachers help to reduce challenging behaviours and promote achievement (Pianta et al., 2012). Where teachers promote mutual respect, a feeling of safety and positive relationships, the risk of bullying is also reduced (Johannson, 2023).

Peer relationships are just as important – the quality and quantity of pupils' friendships affect their attendance (Carroll, 2010) and attainment (Im et al., 2016).

> **Implication 5.1**
> An important role of schools and teachers is to build a sense of relatedness with and between their pupils.

Pupils spend most of their time in school in lessons. Classrooms are therefore vital places to build relatedness through involvement in shared academic work. This can be enhanced through careful attention to daily interactions such as:

- Greeting pupils as they enter the classroom (Cook et al., 2018)
- Asking pupils to respect and build on each other's ideas in discussion (Lemov et al. 2022)
- Giving all pupils the opportunity to answer questions, for example, systematically expecting all learners to answer a question in class boosts voluntary contributions over time (Dallimore et al., 2013)

> **Implication 5.2**
> Teachers can boost relatedness by thinking about the common interactions in their classroom and designing these to communicate belonging.

By valuing extra-curricular activities, pastorally-focused form times and whole-school celebrations we can provide rich opportunities for pupils to build relationships with their peers and teachers. Providing opportunities to experience relatedness supports schools to improve attendance and protect pupils against risk-taking behaviour (Skinner & Pitzer, 2012; ImpactEd, 2024).

> **Implication 5.3**
> Schools can plan, structure and prioritise opportunities for pupils to feel seen, known and valued for their diverse strengths and interests. These might include trips, form time, extra-curricular activities or other school rituals (such as assemblies, awards, concerts and so on).

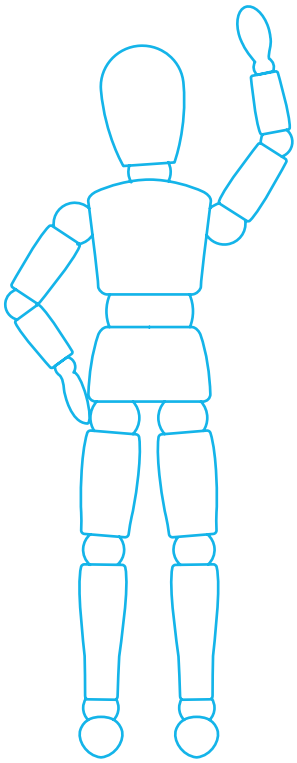
06
Autonomy: ownership and agency are catalysts for motivation

When pupils' need for autonomy is met, it speeds up the process of internalisation for new sources of motivation (Bureau et al., 2021).

However, autonomy in self-determination theory is not the same as choice. What is important is that pupils have good, internal reasons for acting and that they feel like they have initiated their actions. We'll therefore use the terms **ownership** and **agency** here and look at each in turn.

Implication 6.1

Thinking about ownership and agency can help schools provide autonomy to pupils within the constraints of curriculum and lesson structures.



07
Fostering a sense of ownership supports internalisation

Many of the things that are done in school can feel arbitrary – the reasons pupils are asked to learn certain content or behave in particular ways might not be clear to them. This makes it difficult for them to feel ownership over their actions.

Schools normally have good reasons for their behavioural expectations ('We don't talk when the teacher is talking because it stops other people from being able to listen') and have sequenced their curricula to maximise pupil success. However, the reasons behind schools' expectations and their curricular content aren't always communicated with pupils.

By sharing the good reasons for behaving in the ways schools expect and for learning the things that they teach, teachers can help pupils to understand why these things are important. This in turn can help pupils move from external to more internalised motivation.

The first step in this is to be clear about the value and importance of behavioural expectations, curriculum content or lesson activities (Vansteenkiste et al., 2017). This begins by checking that our expectations aren't arbitrary and that we can justify them to our pupils.

We can then offer a rationale. Sharing the reasons that something is important or valuable can improve pupils' interest, engagement and learning (Jang, 2008).

> **Implication 7.1**
> The rationales for expectations need to be identified, communicated and discussed with pupils so they can internalise them.

Providing rationales helps to foster pupils' ownership of behavioural expectations, supporting self-regulation and reducing schools' need to rely on rewards and punishments (Aelterman et al., 2019; Assor et al., 2017). The same can be applied to curriculum content.

Doing this effectively is dependent on teachers knowing their pupils. The reasons to engage need to be seen as meaningful, relevant and important **by them** (Pianta et al., 2012) for pupils to internalise them. This doesn't mean changing curriculum content to be relevant (teaching the 'history of football' for example), it means explaining the value and importance of what is in the curriculum ('This will help us to understand why our political system works like it does today').

> **Implication 7.2**
> The reasons given to pupils for what is expected of them should be meaningful and relevant to them.

What might this look like in practice?

	Non-example of effective rationale	Example of effective rationale
Behavioural focus	'You have to do it that way because I said so.'	'We have routines about how we start the lesson so we have more time available for learning.'
Curriculum focus	'We're learning it because it's on the specification.'	'This is a really interesting section of the novel because it gives us a whole new insight into what motivates the main character'
Relatedness focus	'When someone is talking, you listen.'	'We listen and respond to other people's contributions because it shows we care about what they have to say.'

08
Providing a sense of agency supports integration

Agency can be defined as people acting willingly for their own reasons. By supporting pupils' sense of agency over time we can increase the quality of their motivation.

Allowing pupils a choice of what they learn in class is not a reliable way of generating agency. Perhaps surprisingly, giving pupils options about what tasks they can choose doesn't boost intrinsic motivation (Reeve et al., 2003) and pupils often choose tasks that are not best pitched for their needs (Kirschner et al., 2006). However, there are opportunities to experience meaningful choice in wider school life.

What might this look like in practice?

Schools might choose to offer broader opportunities for pupils to pursue their interests (for example, project-focused qualifications, extra-curricular activities or pupil leadership) or emphasise how opportunities like GCSE options can be linked to their longer-term goals.

During lessons teachers can support pupils' sense of agency proactively and reactively. These processes rely on teachers thinking about learning from the perspective of their pupils (Reeve & Cheon, 2021).

Teachers can proactively engineer opportunities to better understand their pupils through discussion, questioning, or in writing. By listening to pupils' interests and incorporating them into how they frame the topics that they teach, teachers can help foster the feeling that they are working together with pupils to make sense of curriculum content – both parties contributing to a growing and shared understanding.

Implication 8.1

By presenting the learning with pupils' perspectives in mind, pupils feel like their views are being heard and respected.

There is also evidence that agency can be enhanced by asking pupils to generate their own reasons for the value and importance of topics or tasks (Vansteenkiste et al., 2017; Yeager et al., 2014).

Implication 8.2

How teachers present rationales for learning, and get pupils to process them, can enhance their effectiveness.

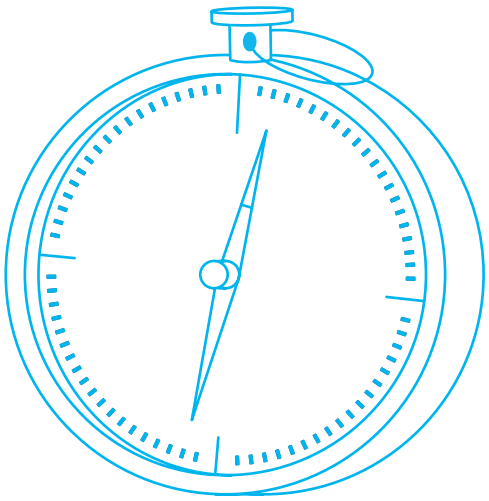
Teachers can also be reactive when pupils respond negatively to their expectations. By acknowledging pupil reluctance as a potentially valid reaction and inviting them to change their perspective, teachers can support the process of internalising new sources of motivation.

What might this look like in practice?

Teachers can support agency when presenting learning by:

- Considering pupils' perspectives and presenting learning in ways that are likely to be seen as meaningful by them. For example, 'We had an interesting debate about the role of Gerald in Eva's death; by analysing Mr. Birling's role our arguments will become even more sophisticated'.
- Acknowledging where pupils may not be feeling inspired but without 'talking down' the learning. For example, 'I know this may feel repetitive but lots of practice will help us with more challenging problems later on'.
- Using invitational rather than controlling language. For example, 'You might want to use the technique from last lesson' rather than 'You need to use fronted adverbials' (Reeve & Cheon, 2021).

Using various approaches in combination shows pupils that their teacher cares about their perspectives and experiences of the learning and helps them to appreciate that it is important, even if it's not always immediately interesting. Knowing that their teacher cares about, listens to and considers their perspectives supports pupils' sense of agency.



09
These approaches are relevant to all children

Schools are constantly varying their approaches to behaviour, teaching and learning to meet the needs of different children – either based on age, context or a particular diagnosis. This need not be the case when meeting their psychosocial needs.

The power of meeting pupils' basic psychosocial needs has been found in studies all over the world – across all continents and in both individualist and collectivist cultures (Ryan & Deci, 2020; Bureau et al., 2021). This suggests that whatever the context of a school, these approaches are applicable.

There are similar findings for pupils with additional needs – interventions that focus on providing experiences of autonomy have had clinically significant effects on supporting pupils with a range of diagnoses (Guay, 2021).

Age is more complex. All pupils benefit when teachers focus on fostering more intrinsic motivation – but it seems to have a particularly powerful effect when dealing with adolescents (Yeager et al., 2017).

> **Implication 9.1**
> Meeting pupils' psychosocial needs is relevant to all contexts and groups of pupils.

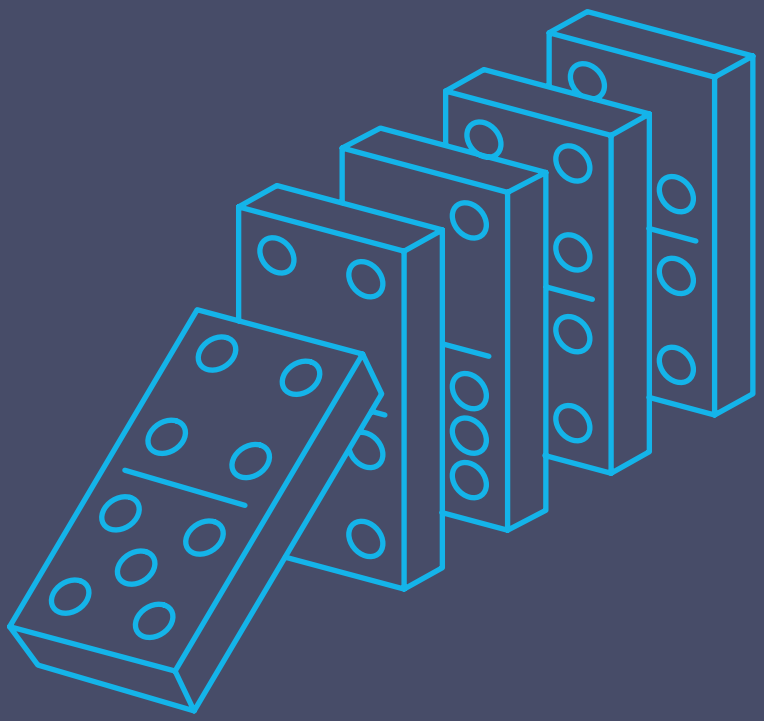
Meeting pupils' psychosocial needs also seems to be effective at fostering pupils' broader sense of wellbeing – and can protect against stress, anxiety and depression (Howard et al., 2021; Kleppang et al., 2023; Kristensen & Jeno, 2024; Yu et al., 2016; Zhang et al., 2021).

> **Implication 9.2**
> Meeting pupils' psychosocial needs is likely to have positive effects on their general wellbeing.

It is equally important to protect our pupils from having their psychosocial needs undermined – which seems to have a particularly damaging effect on their wellbeing and motivation (Zhang & Jiang, 2023) for example:

- Competence: repeated experiences of failure can cause pupils to become completely amotivated. Or, to put it another way "…the poor motivation of low attainers is a logical response to repeated failure" (Coe et al., 2014, p.23).
- Relatedness: being isolated or ostracised from important relationships can lead to risk-taking behaviour (Nagpaul & Chen, 2019).
- Autonomy: being pressured to act in ways that they don't agree with, or feeling like they have no control over what happens to them, reduces pupils' motivation over time (Jang et al., 2016).

> **Implication 9.3**
> Protecting our pupils from having their psychosocial needs undermined is particularly important for their motivation and wellbeing.



Implementation

The impact and success of good ideas in education is deeply affected by how they are implemented. This section offers some lessons from previous studies and programmes.

10
All three needs should be balanced

As outlined, each of the psychosocial needs makes a unique contribution to fostering pupils' intrinsic motivation. By deliberately combining them through our interactions we can magnify their impact.

- When pupils' sense of competence improves, they are more likely to experience positive relationships with their teachers and peers (Skinner & Pitzer, 2012) and it may influence the interest they have in learning (Lee et al., 2024), enhancing their feelings of autonomy.
- Relatedness contributes powerfully to teachers' ability to foster competence and autonomy: when teachers and pupils know and trust each other pupils are more likely to attempt tricky tasks (Usher & Pajares, 2008) and to feel that their need for autonomy is being met (Oga-Baldwin & Nakata, 2015).
- Pupils' experience of autonomy directly affects how they feel about their teacher (Jang et al., 2015) and teachers can encourage pupils to attempt more challenging tasks by presenting them in autonomy-supportive ways (Allen et al., 2011).

> **Implication 10.1**
> When planning to support pupils, all three psychosocial needs should be considered and included.

11
Teachers can learn to fulfil pupils' psychological needs by focusing on interactions

Some teachers are likely to be naturally better at relating to pupils and supporting their autonomy than others. That doesn't mean that all teachers cannot learn to improve in these areas.

Teachers can learn to support pupil autonomy to improve the quality of their motivation (Reeve & Cheon, 2021) and enhance relatedness (Quint et al., 2005).

Programmes that focus on teacher-pupil interactions are some of the most successful professional development programmes ever. They have improved pupils' academic outcomes at primary and secondary levels (Downer et al., 2011; Allen et al., 2011; Allen et al., 2015), enhanced the way pupils interact with each other and engage with school (Mikami et al., 2011; Gregory et al., 2013) and reduced disparities in the treatment of children of different races by their teachers (Gregory et al., 2016). Improved relationships with pupils also seem to enhance teachers' wellbeing (Klassen et al., 2012).

Implication 11.1

The overall quality of pupils' motivation can be influenced by changing the day-to-day interactions between them and their teachers.

Implication 11.2

Professional development can be used to enhance teachers' day-to-day interactions with their pupils.

Implication 11.2

Improved interactions benefit both pupils and teachers.

12
Teachers' classroom goals influence their interactions

One way of influencing teachers' interactions with pupils would be to prescribe exactly how they should interact in different situations.

This might seem desirable – but would undermine impact in the longer term for at least two reasons:

a) Prescribing approaches to teachers is ineffective in driving professional learning (Kennedy, 2016a).

b) It would undermine teachers' own sense of autonomy and competence, which are important to their job satisfaction (Worth & Van den Brande, 2020).

Teachers' interactions are most effective when they understand the purpose of their actions (Kennedy, 2016b) – in one study, where teachers had a strong theoretical grounding in self-determination theory, their ability to reduce pupils' violent behaviour improved (Assor et al., 2017).

This is probably because the unpredictable nature of the classroom means that a very rigid approach would be effective only in certain situations. Where teachers understand the goals they are trying to achieve (that is, meeting pupils' psychosocial needs) they can be more flexible in their use of strategies.

Implication 12.1

Teachers need a deep understanding of the principles underpinning self-determination theory to guide their decisions in the classroom.

13
Teachers need ongoing support to modify their interactions

Theoretical knowledge is not enough to support teachers to develop new teaching practices – they need specific types of development to overcome their existing habits (Hobbiss et al., 2020).

This is an ongoing, extended process. Teachers can rapidly adopt new behaviours, but initially they may not be of sufficiently high quality to change pupil learning (Correnti et al., 2020). In interactions-focused programmes the impact on pupil learning was visible only two years after the programme started (Allen et al., 2011).

> **Implication 13.1**
>
> Teachers need a deep understanding of the principles underpinning self-determination theory to guide their decisions in the classroom.

Professional development focusing on interactions also needs to employ a variety of different mechanisms to support teacher behaviour change (Sims et al., 2021). Many successful programmes use one-to-one coaching as a way of supporting teachers to analyse and modify their existing interactions, but other mechanism-rich approaches (such as teacher learning communities) could also be effective.

> **Implication 13.2**
>
> Applying a range of behaviour change mechanisms can support teachers to modify their classroom interactions in the longer term.

Notes

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