

DEPARTMENT OF EDUCATION

Classroom management: Creating and maintaining positive learning environments

Centre for Education Statistics and Evaluation



Introduction

Classroom management is vital for creating an environment that minimises disruptions, maximises instruction time, and encourages students to engage in learning. Research indicates that effective classroom management contributes to positive learning outcomes. The complexity of classroom management, however, makes it one of the most challenging aspects of teaching. Teachers report persistent low-level student disengagement and disruptive behaviours as major classroom management challenges. Classroom management difficulties are also a leading cause of teacher stress and burnout. Research suggests classroom management is most effective when teachers use preventative and responsive strategies to encourage appropriate (on task, motivated to learn, and prosocial) behaviours and reduce instances of inappropriate (disengagement from learning and disruptive) behaviours.

This literature review first defines classroom management and provides a brief overview of classroom management research. It then describes the characteristics of effective class-wide classroom management strategies. Finally, it considers how to best support teachers' use of effective classroom management strategies.



Defining and measuring classroom management

Classroom management is a broad term that encompasses the preventative and responsive strategies teachers use to support and facilitate both academic and social/emotional learning in the classroom (Everston & Weinstein 2006, p. 4). Effective classroom management creates a learning environment in which students are encouraged to be engaged in lesson activities, motivated to learn and prosocial, and disengaged and disruptive behaviours that are detrimental to learning are calmly corrected (Sullivan et al. 2014).

Although sometimes used interchangeably, classroom management is distinct from behaviour management. Behaviour management involves establishing consistent school-wide expectations about student behaviour in and out of the classroom, and may include intensive support for students with challenging behaviour (Bennett 2017). In contrast, classroom management refers to the strategies teachers use in the classroom to create an environment that supports student learning. Put broadly, behaviour management is about school climate, whereas classroom management is about the classroom environment. School climate can influence the classroom environment and vice versa (Epstein et al. 2008; Osher et al. 2010). The classroom management strategies of individual teachers are critical for creating a positive learning climate, although will be most effective when there is a consistent school-wide approach that provides a shared understanding of the classroom learning environment (Oliver, Lambert & Mason 2019). Therefore, this review focuses on the effective strategies teachers use to create and maintain positive classroom learning environments.

Classroom management is also distinct from classroom discipline. Classroom discipline is the responsive actions taken by teachers with an aim to change student behaviours (Woolfolk Hoy & Weinstein 2006, p. 181). Although effective classroom management involves responsive actions, preventative strategies are prioritised with an aim to support student learning. These preventative strategies may involve teachers changing their own behaviour, which in turn can influence student behaviours in the classroom. By using preventative strategies teachers shape the physical, instructional, behavioural, emotional and social environments to minimise disruptions, maximise instruction time, and encourage students to engage in learning.

The complex interactions between the physical, instructional, behavioural, emotional and social environments in a classroom make it challenging for researchers to measure and evaluate effective classroom management approaches. Although one goal of effective classroom management is to support student academic learning, little research has directly measured the impact of classroom management practices on academic performance¹. This likely reflects the challenge of separating the effect of classroom management practices from other effective teaching practices (Emmer & Stough 2001).

However, as Hepburn and Beamish state:

Put simply, classroom management and student learning are inextricably linked; students cannot learn or reach their potential in environments which have negative and chaotic classroom climates, lack structure and support, or offer few opportunities for active participation. (Hepburn & Beamish 2019, p. 82).

The majority of classroom management research has focused on measuring the quality of the classroom learning environment. The quality of the learning environment is commonly assessed by reports or observations of student:

- engagement in learning (for example, time spent on task and level of motivation to learn)²
- prosocial behaviours (for example, working well with peers and sharing classroom resources)
- passive disengagement from learning (for example, time spent inattentive and frequency of avoiding or opting out of class activities)
- disruptive behaviours (for example, frequency of low-level calling-out and acts of aggression).

This review refers to indicators of engagement in learning and prosocial behaviours as appropriate student behaviours. These appropriate behaviours can be considered part of a broader set of cognitive, social and emotional 'learning behaviours' that students need in order to learn effectively in the classroom (Powell & Tod 2004; Education Endowment Foundation 2019). This review refers to indicators of disengagement from learning and disruptive behaviours as inappropriate student behaviours.



¹ A 2016 meta-analysis of classroom management interventions in primary schools found academic outcomes were measured in only 17% of the identified studies (Korpershoek et al. 2016); a 2003 meta-analysis identified only 5 studies (Marzano, Marzano & Pickering 2003, p. 10).

² Engagement in learning encompasses more than on-task behaviour and student motivation, but these are common indicators used in classroom management research.

Why effective classroom management is important

Effective classroom management addresses disengagement from learning as well as disruptive behaviours in the classroom to minimise negative effects on student learning. A longitudinal study of Western Australian Year 2-11 students found students who were disengaged with instruction, but not disruptive, performed equally poorly on academic outcomes as students who displayed disruptive behaviours (Angus et al. 2009). This finding suggests having few disruptions in a classroom does not necessarily indicate an optimal learning environment as students may be quietly disengaged from learning. That is, students may be compliant in the classroom but not engaged in the lesson content. Effective classroom management strategies minimise and address disengagement in lessons, even if students are not disrupting others in the classroom. Disengagement without disruptive behaviours is of particular concern in high school classrooms where this form of inappropriate classroom behaviour is prevalent. For example, a large observational study of US high schools found that in 23.5% of classrooms students were seldom to rarely disruptive, yet only followed classroom rules and participated meaningfully in lessons some of the time (Pas et al. 2015). In Australia, a Victorian study found that the proportion of teachers reporting lack of engagement as the most challenging student behaviour increased substantially from Years 7 and 8 (5.3%) to Years 11 and 12 (40.5%) (Little 2005).

Classroom management issues are a common concern for teachers. Teachers in Australia and internationally report that students in their classroom frequently display low-level inappropriate behaviours that impact on student learning (Beaman, Wheldall & Kemp 2007; Sullivan et al. 2014). The most common of these inappropriate behaviours are low-level disruptive acts and lack of engagement in learning activities. For example, a South Australian survey of primary and secondary teachers found half of the teachers surveyed encountered students 'talking out of turn' several times during a day and two in five reported students 'avoiding school work' several times a day (Sullivan et al. 2014). Teachers in this survey also reported that these low-level inappropriate behaviours were stressful and hard to manage. More serious inappropriate behaviours were less commonly reported, with 6% of teachers reporting encountering physical violence from students in the week before the survey.

Teachers frequently report that they feel underprepared or unable to address classroom management challenges and this may impact teacher wellbeing. Data from the most recent Teaching and Learning International Survey (TALIS) indicates that less than half of Australian teachers felt 'well prepared' or 'very well prepared' for addressing 'student behaviour and classroom management' upon completion of their initial teacher training (OECD 2019). In addition, data from TALIS suggests only 4 in 5 Australian teachers feel able to 'control disruptive behaviours in the classroom' (OECD 2019). These findings have implications for teacher wellbeing and retention. Compared to teachers who feel confident about classroom management, less confident teachers report higher levels of stress related to the classroom climate (Klassen & Chiu 2010) and are more likely to leave the profession (Hong 2012).

Students report wanting teachers who can effectively manage the classroom learning environment (see Woolfolk Hoy & Weinstein 2006, p.183; Egeberg & McConney 2018) but frequently report that this is not the classroom learning environment that they experience. In a recent Programme for International Student Assessment (PISA) survey, students were asked about their perception of a range of disengaged and disruptive behaviours in their science classroom (Australian Council for Educational Research 2017). Students in NSW reported higher levels of disengaged or disruptive behaviours in the classroom than national and international averages (Australian Council for Educational Research 2017). For example, 44% of NSW students reported that students do not listen to what the teacher says during 'most lessons' or 'every lesson', compared to 32% of Australian students and 28% of students in other countries (Australian Council for Educational Research 2017). Internal analysis³ of *Tell Them From Me* data shows that NSW students who report more effectively managed classrooms are more likely to report having a positive sense of belonging. There is a positive relationship between a sense of belonging at school and student learning outcomes (Australian Council for Educational Research 2018).



3 This analysis was conducted in partnership with The University of Queensland – Institute for Social Science Research.

Classroom management for students requiring additional support

This review describes whole-class management practices teachers can use to facilitate optimal conditions for student learning. Some students, however, may require more intensive support that is tailored to their needs to most effectively engage in learning. For example, students may demonstrate challenging behaviours in the classroom due to disability and additional learning and support needs (Epstein et al. 2008). It is not within the scope of this literature review to look in detail at targeted classroom management for students requiring additional support. However, there is evidence that students with additional needs may benefit from targeted programs that follow similar principles of preventative and responsive strategies as discussed in this literature review, but which additionally provide greater levels of structure and more intensive scaffolding of self-regulation skills (Skiba et al. 2016; Leach & Helf 2016; Osher et al. 2010; Kern & Clemens 2007). For more information about classroom management strategies for students experiencing trauma, see the Centre for Education Statistics and Evaluation's publication on trauma informed practice (Centre for Education Statistics and Evaluation, forthcoming).

What are the characteristics of effective classroom management?

Effective classroom management creates the conditions needed to support optimal student learning. Current models of classroom management focus on creating learning environments that reduce inappropriate behaviours, such as disengagement from learning and low level disruption, and encourage students to adopt appropriate behaviours, such as engaging in lesson activities, being motivated to learn and being prosocial (Sullivan et al. 2014). In recent years research about classroom management has highlighted the importance of preventative strategies, while also acknowledging that responsive strategies have their place in maintaining an environment conducive to learning.

Preventative classroom management strategies create positive environments that support students to engage in learning and prosocial behaviours. Preventative classroom management strategies increase the amount of time for instruction, minimise disruptions and reduce the amount of time teachers spend on responding to inappropriate behaviours (Skiba et al. 2016; Osher et al. 2010; Sugai & Horner 2008; Kern & Clemens 2007). Some researchers frame preventative strategies as teacher-orientated processes that provide predictability and consistency so students know what is expected of them and what to expect in the learning environment (for example, Conroy et al. 2008; Kern & Clemens 2007). Others frame preventative strategies as student-orientated processes that guide and support students' development of social, emotional,

and cognitive self-regulation skills (for example, Freiberg & Lamb 2009; Powell & Tod 2004). Despite these differing perspectives, there are commonalities in the implications for classroom management strategies. For example, there is agreement that many classroom management concerns can be addressed using whole-class preventative strategies to help all students stay engaged in learning (Osher et al. 2010).

Responsive classroom management strategies address student behaviours that may impact their own and other students' learning. Responsive classroom management strategies include effectively correcting inappropriate behaviours. Effectively correcting inappropriate behaviours supports students to re-engage in learning, minimises distractions and maintains a positive classroom climate. Responsive classroom management strategies may also involve using praise and rewards to recognise appropriate student behaviours, however, there is mixed evidence about the effectiveness of these practices.

Meta-analyses have found that effective classroom management interventions increase appropriate (on task and engaged in learning) behaviours (Chaffee et al. 2017; Marzano, Marzano & Pickering 2003, p. 10) and reduce inappropriate (disengagement from learning and disruptive) behaviours (Oliver, Wehby & Reschly 2011; Korpershoek et al. 2016; Chaffee et al. 2017). There is more limited evidence about the direct effect of classroom management interventions on academic outcomes. A recent meta-analysis of primary school classroom management programs found a trend suggesting teacher-based training programs may improve student academic outcomes (Korpershoek et al. 2016). An older meta-analysis of five studies on classroom management found a positive effect on student academic performance (Marzano, Marzano & Pickering 2003, p. 10). Determining the specific characteristics of effective classroom management, however, can be difficult due to the multiple interactions between physical, instructional, behavioural, emotional and social management factors in the classroom. The National Council of Teacher Quality (NCTQ 2014) combined three prominent reviews of the classroom management literature and found the classroom management techniques with the most evidence behind them were: practices that encourage student engagement in lessons, rules, routines, praise, and consistent (and escalating) consequences. The NCTQ also noted the importance of positive student-teacher relationships for effective classroom management. Similarly, the Education Endowment Foundation (2019) and the American Psychological Association's Coalition for Psychology in Schools and Education (Lucariello et al. 2016) identify positive student-teacher relationships as a critical aspect of effective classroom management.

The most effective classroom management approaches combine preventative and responsive strategies. Preventative strategies aim to create classroom environments where the majority of students are engaged in learning and on task. Preventative strategies reduce the amount of time teachers spend addressing inappropriate behaviours because they reduce disengagement from learning and disruptive behaviours. This review outlines the most effective preventative strategies:

- Positive classroom climates, with high quality student-teacher relationships and explicit teaching of social and emotional skills
- Structured instruction to engage and motivate students in learning
- Providing and explicitly teaching effective rules and routines
- Offering pre-corrections to remind students of expectations
- Using active supervision to help students stay on task.

This review also considers responsive strategies for correcting inappropriate behaviours. Effective corrective responses aim to support students to re-engage in learning, minimise distractions and maintain a positive classroom climate. This review outlines the following aspects of effective corrective responses:

- Identifying student needs
- Ensuring students understand corrective responses
- Consistent and expected responses
- Remaining calm
- Responding proportionally to level of behaviour displayed.



Culturally responsive classroom management

Culturally responsive classroom management involves teachers recognising how their beliefs, values and expectations have been informed by their own culture and may influence how they perceive students in their classrooms (Weinstein, Tomlinson-Clarke & Curran 2004). Mismatched beliefs, values and expectations can result in teachers misinterpreting the behaviour of a student which increases the likelihood of inequitable treatment of the student (Skiba et al. 2016). Cultural responsiveness involves teachers developing both their understanding of their students' cultural backgrounds and also their understanding of broader power, social, economic, and political factors (Weinstein, Tomlinson-Clarke & Curran 2004). Culturally responsive classroom management aims to create caring, respectful classrooms in which mutual respect and understanding is built:

... teachers accept and build on students' language and culture but also equip students and their families to function within the culture of the school in key areas needed for academic progress and order (for example, attendance, homework, punctuality) (Weinstein, Tomlinson-Clarke & Curran 2004, p. 33).

Culturally responsive classroom management is particularly important in the Australian context since students in Australian schools come from a range of different cultural backgrounds. For example, in NSW in 2018, 1 in 3 students enrolled in government schools were from a language background other than English and 1 in 12 were Aboriginal and Torres Strait Islander students (NSW Department of Education 2019). Despite these figures, however, there is limited research about culturally responsive classroom management in Australia.

A recent systematic literature review about classroom management strategies for Aboriginal and Torres Strait Islander students identified several common practices that align with culturally responsive classroom management principles. These practices include teachers understanding themselves and their students, having knowledge of their students' culture and broader socio-historical power relations, and developing connections with students' families and communities (Llewellyn, Boon & Lewthwaite 2018, p. 18). The authors of the review noted, however, that there is limited research about the effective implementation of these practices in Australian schools.

Preventative strategies

Preventative strategies aim to create classroom environments where the majority of students are engaged in learning and on task. They reduce the amount of time teachers spend addressing inappropriate behaviours because they reduce disengagement from learning and disruptive behaviours. Effective preventative classroom management strategies include encouraging a positive social and emotional classroom climate, using structured instruction, using rules and routines, providing pre-corrections to remind students of expectations, and actively supervising the classroom to ensure all students are supported to stay engaged in learning.

Positive classroom climate

A positive classroom climate is characterised by warm, respectful and sensitive interactions between students and their peers, and between students and their teacher. Establishing and maintaining a positive classroom climate is an important preventative classroom management strategy because it encourages students to be engaged in learning (Pianta, Hamre & Allen 2012, p. 373). It can also reduce the frequency and severity of disruptive and antisocial student behaviours in classrooms. The classroom climate is impacted by the quality of the relationships teachers have with each of their students and the social and emotional competence of students.

Student-teacher relationships

Establishing and maintaining positive relationships between teachers and students can impact the classroom learning environment. Student-teacher relationships are commonly measured by reported levels of conflict and closeness (McGrath & Van Bergen 2015). There is evidence to suggest a two-way relationship between student-teacher relationships and student behaviour in the classroom: student behaviour can influence the quality of the student-teacher relationship, and the quality of the student-teacher relationship can influence the behaviours a student exhibits in the classroom. It can be challenging for teachers to establish and maintain low conflict and close relationships with students who are disengaged or disruptive in the classroom. For example, a student starting Kindergarten with high levels of disruptive behaviours is one of the strongest predictors of high levels of student-teacher conflict later in the year (O'Connor, Dearing & Collins 2011). Kindergarten teachers also report low levels of closeness with students who have lower levels of self-regulation skills (Walker & Graham 2019).

Research suggests that positive student-teacher relationships can protect some children from being disengaged and disruptive in classrooms. Furthermore, the students it might be most challenging for teachers to form quality relationships with, might benefit the most from positive student-teacher relationships. For example, students with high levels of internalising behaviours (for example, fearful or withdrawn behaviours that can lead to disengagement in the classroom) in early childhood have shown a reduction in these behaviours in late primary school when they had consistent positive relationships with their teachers (O'Connor, Dearing & Collins 2011).

In addition, students who entered school with high levels of externalising behaviours (associated with disruptive acts in the classroom) showed a reduction in these behaviours when they had higher levels of closeness with their Kindergarten teacher, but an escalation in these behaviours if the student-teacher relationship was low in closeness (Silver et al. 2005). A longitudinal Swiss study examined the unique contribution student-teacher relationships have on student classroom behaviour by matching like pairs of 10 year old students on a large range of characteristics that may influence behaviour including past positive or negative behaviour, gender, socio-economic status, attitudes towards school and peers, and parenting practices (Obsuth et al. 2017). This study found that even when all these other factors were similar, teachers reported fewer aggressive and/or defiant behaviours and more prosocial behaviours when the teacher and student perceived their relationship as more positive. These studies suggest that even when students have challenging behaviours, high quality student-teacher relationships can still be established and can support students to increase their appropriate behaviours and reduce their inappropriate behaviours in the classroom.

Few studies have investigated classroom management interventions that primarily target improved student-teacher relationships. In a primary school context, Aasheima et al. (2018) examined changes in student-teacher relationship quality after implementing a school-wide classroom management program that included a training module on student-teacher relationships. This training provided teachers with strategies to reflect on their own behaviour, emotions, and thoughts when interacting with their students, especially students with challenging behaviours. Teachers in schools that received the intervention reported greater decreases in student-teacher conflict and increases in student-teacher closeness than teachers in non-intervention schools. Furthermore, the reduction in levels of conflict was greatest for students with challenging behaviours. More targeted classroom management interventions that include strategies to create positive student-teacher relationships have also been found to increase appropriate behaviours and decrease inappropriate behaviours. For example, the simple act of greeting Year 6 to 8 students as they enter the room was found to increase the time students spent engaged in learning and decrease the time students spent displaying disruptive behaviours in the classroom (Cook et al. 2018). While more research is needed to provide stronger evidence, these studies offer some evidence that teacher-based training can not only improve the quality of student-teacher relationships but may also help students to engage in learning in the classroom.

Emotional and social competence

A student's emotional and social competence can impact their ability to engage in appropriate (on task, motivated to learn and prosocial) behaviours and not engage in inappropriate (disengagement from learning and disruptive) behaviours. Supporting the development of emotional and social competence is also important for creating and maintaining positive classroom climates as it can impact how students interact with teachers and their peers (Skiba et al. 2016).

One way to support social and emotional competence is by using social and emotional learning (SEL) programs to explicitly teach students cognitive, affective, and behavioural skills including self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Collaborative for Academic, Social, and Emotional Learning 2015). A meta-analysis found that SEL programs delivered by classroom teachers that teach students about emotions, managing stress, empathy, and decision-making, are effective in improving a number of student outcomes including reducing disruptive classroom behaviours, increasing prosocial classroom behaviours and improving academic outcomes (Durlak et al. 2011).

Providing high levels of emotional support in their classrooms is another way teachers can support student social and emotional competence and reduce inappropriate behaviours. A classroom high in emotional support is characterised by warm, respectful, sensitive and responsive teacher interactions with the class as a whole, with few interactions involving anger, irritability, or sarcasm (Buyse et al. 2008).

Kindergarten teachers who provide high levels of emotional support in their classrooms report low levels of conflict with their students (Walker & Graham 2019), including with those students who have high levels of externalising behaviours (for example, aggressive or hyperactive behaviours) (Buyse et al. 2008). High levels of emotional support remain important in the later years of primary school to reduce inappropriate behaviours. A study of Year 3 to 5 classes, found a high level of emotional support was associated with fewer reported inappropriate student behaviours and higher emotional learning and academic outcomes, than in classrooms where teachers provided a low level of emotional support (Rucinski, Brown & Downer 2018).

The degree of emotional support teachers provide their class can also influence peer dynamics which in turn can impact on the learning environment in the classroom. Teachers who provide high levels of emotional support play an important role in modelling, monitoring and facilitating the social norms in the classroom (for example, expectations about how to interact with others in the classroom) (Farmer, Reinke & Brooks 2014). That is, how the teacher acts towards students can influence how students interact with each other and thus the quality of the classroom learning environment. For example, a US study of Year 5 and 6 classes over a six month period found that students in classrooms with low emotional support became more like their disruptive friends and engaged in more disruptive behaviours (Shin & Ryan 2017). This peer influence contributed to the overall level of disruptive behaviours increasing in classrooms low in emotional support. This peer influence on disruptive behaviours was not seen in classrooms with high levels of emotional support.



Structured instruction

One way to increase appropriate behaviours in the classroom is through structured instruction⁴. Structured instruction involves clear communication of learning expectations and how to meet them, what the lesson will cover, task directions, and also providing timely task-focused feedback, organised and consistent lessons, and smooth transitions between learning activities (Jang, Reeve & Deci 2010). A substantial literature suggests structured instruction is important for supporting students to understand task requirements and stay on task, increasing appropriate behaviours and decreasing inappropriate behaviours (for review see Simonsen et al. 2008). Some researchers argue that structured instruction contributes to students' internal (or 'intrinsic') motivation to stay on task and engage in learning activities because students feel competent and in control of their learning (Jang, Reeve & Deci 2010)⁵. Well-developed internal motivation for appropriate classroom behaviours can support students to maintain these behaviours even in the presence of external factors detrimental to learning (for example, other students' disruptive behaviours).

Opportunities to respond

One strategy for providing structured instruction is through the use of 'opportunities to respond'. Teacher-provided opportunities to respond (OTRs) are prompts in the form of questions, commands, or directions that require students to think about and respond to the content of a lesson (Cooper & Scott 2017). OTRs may be offered to groups (known as unison OTRs) or individuals, and responses may be verbal or non-verbal. For example, a teacher may ask an individual student to answer a question, or ask all students to write their answers on individual whiteboards to be held up so the teacher can see all responses⁶. High rates of OTRs have been found to increase engagement and reduce disruptive behaviours in classrooms. For example, a US observational study found that primary school students spend more time behaving appropriately (engaged in lessons) with teachers who have average or high interaction practices (average to high rates of OTRs and positive feedback) than students with teachers who have low interaction practices (Gage et al. 2018). In addition, use of unison OTRs has been found to increase appropriate behaviours (Haydon & Hunter 2011; Haydon et al. 2010; McKenzie & Henry 1979) and decrease inappropriate behaviours (Armendariz & Umbreit 1999; Lambert et al. 2006; Haydon et al. 2010) when compared to use of individual OTRs. These findings suggest that unison OTRs can provide an efficient, low cost technique to increase the chance for every student in the class to participate in the lesson and receive positive and timely feedback (Menzies et al. 2017).



⁴ Structured instruction as used in this instance is not analogous with explicit instruction. Although structured instruction may include explicit teaching strategies, the principles of structured instruction can be applied to a variety of teaching practices.

⁵ Students' internal motivation for appropriate classroom behaviours may be best supported by teachers not only using structured instruction but also autonomy supportive instruction. Autonomy supportive instruction involves teachers facilitating students' internal resources for motivation (for example, by providing appropriately challenging learning goals), avoiding the use of controlling language (for example, 'should', 'must', 'have to', or 'got to') and considering students' views, emotions, and preferences (for example, acknowledging students' experience of negative feelings during lesson activities) (Jang, Reeve & Deci 2010).

⁶ For an example of how this works in practice, see the Centre for Education Statistics and Evaluation (2019) case study on Blue Haven Public School.

Rules and routines

Classroom rules are statements that identify acceptable and/or unacceptable behaviours in the classroom (Alter & Haydon 2017). Classroom routines are explicit guidelines for procedures or recurring events in the classroom (Epstein et al. 2008). Rules and routines serve different functions in the classroom, but the principles underlying their effective use as classroom management strategies are similar.

Classroom rules are considered fundamental to effective classroom management (Epstein et al. 2008). A recent review of research about the characteristics of effective classroom rules identified fifteen studies that were either empirical studies examining the impact of classroom rules on student behaviour, or were descriptive studies that had explored the use of rules in a classroom management context (Alter & Haydon 2017). The findings from these studies provided strong evidence that classroom rules are most effective when they are explicitly taught, and consistently connected to positive and/or negative consequences that are applied immediately (Alter & Haydon 2017). Research is less conclusive about other characteristics of effective classroom rules (for example, involving students in creating rules) but suggests it is important to make rules observable, specific and clear (Alter & Haydon 2017; Reinke, Herman & Stormont 2013).

Routines can be used in a range of situations to help minimise disruption and support student engagement in learning. Routines increase the predictability and structure in classrooms so students know what is going to happen when, and what they should be doing during and between regular classroom events and activities. Predictability and structure can benefit all students but may be especially helpful to scaffold and support students with challenging behaviours (Cooper & Scott 2017) or students who have experienced trauma (see Centre for Education Statistics and Evaluation, forthcoming). Teachers may create routines for the beginning and ending of the day or class, transitions (for example, moving from one lesson activity to the next), different types of learning activities (for example, teacher-led instruction and group work activities), and for frequently occurring classroom events (for example, distributing and collecting materials). As with rules, routines are more likely to be effective when they are explicitly taught to students (Cooper & Scott 2017; Epstein et al. 2008).

Cognitive and developmental factors may influence the effectiveness of rules and routines in the classroom. For example, due to the limited capacity of working memory, a small number of rules may be easier than a long list of rules for students to learn (Kern & Clemens 2007). Similarly, routines may be easier to learn when each step contains one action, and when the total number of steps does not exceed working memory limits⁷. In addition, students will not be able to follow rules and routines that they do not understand. Therefore, using plain language for rules and routines may increase understanding for all students, especially those with language development delay (Snow 2014).

Pre-corrections

Pre-corrections are positively stated reminders of expectations that are used proactively to help support students to engage in appropriate behaviours (Ennis et al. 2018). Pre-corrections can be brief verbal reminders of expectations or can be an instructional activity (Ennis et al. 2018). For example, a teacher may remind their class about the expectations about taking turns to talk before a whole group discussion. Pre-corrections can also be targeted towards individual students who demonstrate difficulties regulating their behaviour in certain contexts (Colvin, Sugai & Patching 1993). For example, a student who has difficulties transitioning into the learning environment could be offered a positively stated reminder of the expected next step as they enter the classroom. The aim of pre-corrections is to reduce the incidence of inappropriate behaviours and thus reduce the need for corrective responses (Ennis et al. 2018). Pre-corrections also aim to increase the incidence of appropriate behaviours, thus providing teachers with more opportunities to offer positive statements towards students (Ennis et al. 2018).

Although rarely used in isolation from other classroom management strategies, a recent meta-analysis concluded that pre-corrections met the criteria for being an evidence-based practice (Ennis et al. 2017). Research suggests that pre-corrections contribute to reducing inappropriate behaviours when used in mainstream classes in primary school (for example, De Pry & Sugai 2002) and in high school (for example, Haydon & Kroeger 2016; Hunter & Haydon 2019). Cook et al. (2018) found offering pre-corrections to specific students (based on disengagement and disruptive behaviours in the previous lesson) as they entered the classroom contributed to a reduction in rates of inappropriate behaviours.



⁷ For more information about working memory capacity see Centre for Education Statistics and Evaluation (2017).

Active supervision

Active supervision involves moving about the classroom, scanning for signs of on-task or off-task behaviour, predicting when inappropriate behaviour is likely, redirecting students to on-task behaviour and acknowledging appropriate behaviours (Menzies et al. 2018). Active supervision sits on the cusp between preventative and responsive classroom management strategies due to its proactive and dynamic nature. Effective active supervision requires a classroom layout and seating arrangement that allows the teacher to see all students and move about the room with ease (Hunter & Haydon 2019). From an instructional perspective, active supervision provides teachers with an opportunity to identify students who need assistance or extension with the lesson content. This can help prevent students who do not understand a task or students who are bored by a task from disengaging passively or becoming disruptive. Descriptive studies from the 1960s and 1970s suggested that effective classroom managers were aware of what everyone in the classroom is doing (sometimes referred to as 'with-it-ness') and do not become focused on just one or two students (for review see Brophy 2006). Studies of interventions with an active supervision component have found that active supervision in the classroom improves the quality of the learning environment (Haydon & Kroeger 2016; Hunter & Haydon 2019).

Responsive strategies

Responsive classroom management strategies address student behaviours that may impact their own and other students' learning. Responsive strategies include correcting inappropriate behaviours to support students to re-engage in learning. Effective corrective responses⁸ address students' needs, ensure students understand the corrective response, provide consistent and expected responses, are delivered calmly and are proportional to the level of behaviour. Responsive classroom management strategies may also use praise and rewards to recognise appropriate student behaviours, however, there is mixed evidence about the effectiveness of these practices (see 'Positive reinforcement of appropriate behaviours' text box).

Correcting inappropriate behaviours

An important responsive classroom management strategy is correcting inappropriate behaviours. Consistent implementation of preventative strategies can reduce the frequency and severity of disengagement from learning and disruption, but is unlikely to stop all occurrences of these in the classroom, therefore responsive strategies such as correcting inappropriate behaviours may also need to be used. The dynamic nature of classrooms also mean preventative approaches alone may not be enough to ensure effective classroom management. Effective corrective responses not only stop inappropriate behaviours and support re-engagement in learning, but also minimise distractions and maintain a positive classroom climate.

While the term 'corrective response' may bring to mind harsh or punitive consequences, effective corrective responses provide positive support in response to inappropriate behaviours:

When using a hierarchy of supportive consequences, the focus shifts from delivering consequences to let the students know they are doing something wrong to delivering consequences to positively redirect students and help them meet the classroom expectations (Leach & Helf 2016, p. 30).

There are several factors that contribute to the effectiveness of corrective responses. These include identifying student needs, ensuring students understand the corrective response, providing consistent and expected responses, remaining calm, and responding proportionally to the severity of the inappropriate behaviour.



⁸ Corrective responses involve providing students with specific feedback and/or consequences that support them to meet classroom expectations.

Identifying student needs

An important consideration when providing corrective responses is to identify what a student needs to support them to re-engage in learning. Understanding why a student is disengaged from learning or being disruptive is critical for providing an appropriate and effective corrective response. Students may demonstrate the same disengaged or disruptive behaviour for different reasons (Epstein et al. 2008). For example, a student may start talking to their friends during an independent lesson activity if they do not realise the teacher expects them to work quietly, they do not remember the task instructions, the task is too difficult, the task is too easy, or they are having trouble focusing on the task due to difficulties self-regulating their attention or emotions. To effectively respond to each of these instances of disruptive talking, a different type of corrective response is required to ensure not only that the inappropriate behaviour stops, but also that the student is supported to re-engage in the learning activity. For example, a student who did not know they were expected to work quietly may be redirected back on task by a teacher reminding the whole class they should be working quietly. However, this reminder for a student who is finding the task too difficult may stop them talking but not stop them from quietly disengaging from the task. In this latter case, more effective responses would offer further instruction on the task content or adjust the task to meet the student's current ability level.

Ensuring students understand corrective responses

For students to successfully stop an inappropriate behaviour and learn from a corrective response they need to understand why it is being given. The manner in which teachers provide corrective responses can impact student understanding. For example, avoiding rapid sequences of corrective responses is advised so that students have sufficient time to attend, comprehend and react appropriately (Kern & Clemens 2007). In addition, keeping corrective responses brief and specific is important for providing students with the most relevant information to learn, much like academic error corrections (MacSuga-Gage, Simonsen & Briere 2017; Conroy et al. 2008; Simonsen et al. 2008). Longer explanations that do not use plain language may be especially difficult for students with delayed language development to comprehend (Snow 2014).

Consistent and expected responses

Consistent and expected responses to inappropriate behaviours can reduce student confusion and frustration (Barbetta, Norona & Bicarid 2005). Inconsistent responses, on the other hand, can impact negatively on the classroom climate as students notice and can be sensitive to teachers treating students differently (Woolfolk Hoy & Weinstein 2006, pp. 190-191). Perception of injustice or unfair treatment may contribute to a decline in classroom climate and student-teacher relationships, which can in turn lead to a rise in inappropriate behaviours in the classroom. For example, a German study in primary school classrooms found student sensitivity to injustice was associated with observed negative student-teacher interactions: the more students were prone

to perceiving injustices the less respectful the interactions (Ehrhardt-Madapathi, Pretsch & Schmitt 2018). Expected corrective responses help students to understand why a corrective response is being given, and can be discussed when teaching students the rules and routines of the classroom. Although the reason for corrective responses may be clear to the teacher, it is not always clear to students and this may limit their ability to learn from the corrective response. For example, an Australian study found only 30% of students sent out of class felt they had been given a reason for the consequence, but students who did feel they were given a reason were more likely to accept responsibility for the inappropriate behaviour (Lewis, Romi & Roache 2012).



Remaining calm

Teachers remaining calm and refraining from expressing negative emotions (for example, using a harsh, aggressive or sarcastic tone) is important when providing corrective responses to inappropriate behaviours. Regulation of negative emotions reduces the likelihood of a corrective response escalating inappropriate behaviour (Epstein et al. 2008; Woolfolk Hoy & Weinstein 2006). Aggressive corrective responses may exacerbate disengagement from learning and disruptive behaviours in the classroom. For example, students report aggressive teacher responses as distracting even when they are not the targeted student (Montuoro & Lewis 2018; Lewis 2001). In addition, students who report more frequent use of aggressive teacher responses have more negative views of their teacher (Romi et al. 2011), suggesting these approaches may also impact the quality of the student-teacher relationship.

Remaining calm can be challenging when responding to inappropriate behaviours. Teachers report frequently attempting to suppress their negative emotions in the classroom (Sutton 2005; Sutton, Mudrey-Camino & Knight 2009), but that this can be challenging. At least a third of teachers surveyed in Australia, Israel and China self-reported that they sometimes 'yell in anger' when responding to inappropriate behaviours, while over 40% of students in these countries reported their teachers sometimes 'yell in anger' in response to inappropriate behaviours in the classroom (Romi et al. 2011). Regulating negative emotions may be particularly difficult when teachers are providing corrective responses to students with challenging behaviour with whom they report high levels of conflict and low levels of closeness (Evans, Butterworth & Law 2019). It may also be difficult for teachers to regulate their negative emotions when they have existing concerns about the level of disengagement and disruption in their classrooms. Teachers who report a higher level of concern about inappropriate behaviours in their classroom also report using more aggressive and punitive classroom management strategies than teachers who are less concerned about inappropriate behaviours in their classroom (Roache & Lewis 2011).

Responding proportionally to the level of behaviour displayed

Inappropriate behaviours can range from low-level disengagement from learning (for example, inattention) and disruptive behaviours (for example, calling out) to more severe disengagement from learning (for example, avoiding lesson activities) and disruptive behaviours (for example, physical aggression). As such, a variety of proportionate and escalating responses to these behaviours is required (Simonsen et al. 2008; Epstein et al. 2008; Leach & Helf 2016; NCTQ 2014).

Proportionate and escalating corrective responses can reduce the number of times teachers stop instruction to address inappropriate behaviours. To address low-level disengagement or disruption, for example, a teacher may first try non-verbal strategies such as proximity (that is, moving closer to the student/s) and then try making eye contact or gesturing (NCTQ 2014; Barbetta, Norona & Bicard 2005). These non-verbal techniques allow instruction to continue without the teacher interrupting the lesson. If the inappropriate behaviour persists, a brief corrective statement that is specific to the behaviour is less disruptive to instruction than a long statement.

Proportionate and escalating corrective responses can also help maintain a positive classroom climate through the use of positively phrased statements. For example, if a student is off-task a teacher may offer positive statements about other students' on-task behaviours, increasing the proximity to the student if they continue to be disengaged from learning. If the student remains off-task, teachers can then offer a positive statement about the expected on-task behaviour to the student, repeating and rephrasing until they demonstrate they are re-engaged in learning (Clair et al. 2018; Leach & Helf 2016). Teachers can also use positively phrased statements to provide options to students who are disengaged from learning or disruptive. For example, a student who is not participating in a group work task could be offered the choice of re-joining the group or working independently at their own desk (Epstein et al. 2008). Both these techniques allow students an opportunity to self-correct by providing them with information about the classroom expectations, and without the use of negatively phrased corrective responses.



Positive reinforcement of appropriate behaviours

Positive reinforcement involves the use of praise or rewards to acknowledge when a student or group of students are demonstrating appropriate behaviours. There is mixed evidence for the effectiveness of positive reinforcement as a classroom management practice. Despite the mixed evidence base, positive reinforcement is frequently used in classrooms, especially in primary schools (Roache & Lewis 2011).

Proponents of positive reinforcements argue that praise and rewards can be useful tools for classroom management. A recent systematic review of teacher-based praise interventions found increases in engagement in learning and/or decreases in inappropriate behaviours in 7 in 10 cases (Moore et al. 2019). Sincere, genuine praise may also contribute to positive student-teacher relationships and more generally to creating a positive classroom climate (Epstein et al. 2008). Several meta-analyses of classroom management interventions involving rewards for appropriate behaviours also suggest positive effects for engagement in learning and/or reducing inappropriate behaviours in the classroom (Chaffee et al. 2017; Little, Akin-Little & O'Neill 2015; Maggin et al. 2011).

Critics of positive reinforcement argue that providing praise and rewards (particularly expected, tangible rewards) for appropriate behaviour encourages students to be motivated by external (or 'extrinsic') factors (Deci, Koestner & Ryan 2001). That is, the student engages in appropriate behaviour in the classroom only to earn the praise or reward. If the praise or reward is removed then the student does not have internal (or 'intrinsic') motivation to continue to engage in appropriate behaviours. This lack of internal motivation also reduces the likelihood of the appropriate behaviour carrying over into other classrooms or different contexts.

The evidence suggests that praise or rewards should not be used if students already reliably demonstrate the appropriate behaviours (Epstein et al. 2008). If praise and rewards are used, research suggests potential harm to intrinsic motivation may be minimised by:

- delivering soon after the expected behaviour is demonstrated
- clearly and explicitly linking to a specific expected behaviour
- acknowledging effort
- using a variety of small rewards
- fading out as a student reliably demonstrates the expected behaviour (Epstein et al. 2008; Landrum & Kauffman 2006, pp.59-60; Simonsen et al. 2008).

Supporting the implementation of evidence-based classroom management strategies

For classroom management strategies to be most effective, there needs to not only be a commitment from the individual teacher, but also a consistent school-wide approach, access to professional learning, and proactive wellbeing support for teachers.

Shared understanding of expectations and values across the whole school can help support effective classroom management. Effective whole school approaches involve explicit, consistent and clearly communicated expectations, rules and routines (Skiba et al. 2016; Osher et al. 2010; Reinke, Herman & Stormont 2013). A whole school approach provides structure and predictability, reducing the need for students to adapt their behaviour across different classrooms. This structure can also help support teachers, especially casual teachers. Casual teachers often do not have the advantage of time and permanency to develop rules, routines or high quality relationships with students (Goss, Sonnemann & Griffiths 2017). If students already have an understanding of expectations about the learning environment, this provides casual teachers with a framework to quickly establish a classroom environment that is conducive to learning.

A whole school approach can also help to create and maintain supportive relationships with parents and carers, which can in turn have a positive effect on student behaviour. Clear communication processes between school and home can be beneficial to classroom management by facilitating mutual understanding and expectations of the learning environment (Epstein et al. 2008; Minke & Anderson 2005). In addition, school climate and culture influences the level of trust and respect parents feel when engaging with the school (Minke & Anderson 2005). When parents feel their perspectives are valued, they are more likely to have direct involvement in school activities. Direct parent involvement in schools, including attending meetings and volunteering, has been found to have a positive association with student behaviour (Pomerantz, Moorman & Litwack 2007, as cited in Bennett 2017).

Accessible and appropriate classroom management professional learning may contribute to teachers feeling a sense of school-level support. The degree to which teachers feel this sense of support can impact their classroom management practices. For example, a Victorian study found that, after personal pressures (for example, stress and workload), teachers perceived a lack of school-level support as the next most common barrier to using optimal classroom management strategies (Salkovsky, Romi & Lewis 2015). Effective classroom management practices can also be supported by facilitating staff access to professional learning and feedback. School leaders can assist teachers in accessing professional learning, providing feedback on classroom practices and supporting open and honest problem solving among staff. Providing opportunities for monitoring, feedback and planning support after initial professional learning can improve the appropriate use of classroom management practices (Mitchell, Hirn & Lewis 2017).

Early career teachers may especially benefit from classroom management support and professional learning. Data from TALIS suggests that internationally 87% of experienced teachers report being able to control disruptive behaviours compared to 78% of new teachers (OECD 2019). Similarly, an Australian study found that pre-service teachers at the end of their training reported feeling only somewhat prepared to address a range of classroom management issues such as disruptive behaviours, student disorganisation, and aggressive behaviours (O'Neill & Stephenson 2012). School-wide processes that provide support with preparation and ongoing feedback about classroom management may help new teachers feel more confident about their classroom management skills.

Providing proactive wellbeing support for teachers is another important strategy for maintaining positive learning environments. As noted above, Victorian teachers reported personal pressures such as stress and workload as the most common reasons they felt unable to use their ideal classroom management strategies (Salkovsky, Romi & Lewis 2015). Another Victorian study found teachers who reported high levels of teaching related stress also reported using more responsive and less preventative classroom management strategies (Clunies-Ross, Little & Kienhuis 2008). Teachers with greater social and emotional resources (for example, supportive relationships with colleagues and a positive approach to teaching) are better able to self-regulate and maintain a positive learning environment (Sutton 2005).

Conclusion

Effective classroom management is crucial for creating and maintaining an environment that facilitates learning. Evidence suggests that both preventative and responsive strategies can be used by teachers to encourage students to behave in appropriate (on task, motivated to learn and prosocial) behaviours and reduce inappropriate (disengaged and disruptive) behaviours. Effective preventative strategies include creating and maintaining a positive classroom climate, using structured instruction to engage and motivate students in learning, explicitly teaching students rules and routines, using pre-corrections to remind students of appropriate behaviours, and actively monitoring the classroom. Effective responsive strategies require correcting inappropriate behaviours in a way that addresses the student's needs, is understood by the student, is consistent, expected, calm, and proportionate to the level of inappropriate behaviour displayed. Classroom management strategies should be supported by a whole school approach, access to professional learning, and proactive wellbeing support for teachers.



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Please cite this publication as:

Centre for Education Statistics and Evaluation (2020), *Classroom management - creating and maintaining positive learning environments*, NSW Department of Education, cese.nsw.gov.au