

Chapter 7

Dimension Five

Ensuring an Orderly and Safe Environment

From the point of view of leadership action, this dimension of leadership comes first. If students and staff do not feel physically and psychologically safe, if discipline codes are perceived as unfair and inconsistently enforced, then little progress is likely in the improvement of teaching and learning.

When Mayor Michael Bloomberg took over control of New York City schools in 2002, the first stage of his two-part reform agenda was to bring order to their management, staffing, and organization. Once that was achieved, attention turned to achieving ambitious goals for improved teaching and learning (Odden, 2009). A similar sequence was followed in the reform of Chicago public schools (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998).

The reason why this dimension is discussed last rather than first is that much of the knowledge leaders need to do this work well is embedded in the previous four dimensions and the three capabilities that underpin them. In the absence of order, educational improvement is unlikely, but, in acting to improve order, leaders must keep educational ends constantly kept in mind. If student management policies and procedures are disconnected from the quality of curriculum and instruction, the result is likely to be the increasing use of external incentives and sanctions to get students to engage in school and classroom activities from which they feel alienated. If, however, leaders understand such things as how students experience particular classes, how trust develops between teachers and students, and how good teaching fosters students' engagement and success, then student management policies and processes are more likely to serve educational values.

The Effect of Creating a Safe and Orderly Environment on Student Outcomes

Dimension Five was derived from eight studies that surveyed teachers about how their leaders performed tasks relevant to this dimension.

The first aspect of this dimension concerns the orderliness and safety of the school's physical and social environment and includes practices such as the following: Providing a safe and orderly environment Providing a comfortable and caring environment Ensuring clear and consistently enforced discipline codes Ensuring high expectations for social behavior The more positive the

response of teachers on these survey items, the higher the achievement levels of the students, after differences in their background were taken into account (Heck, 2000; Heck, Marcoulides, & Lang, 1991).

A second aspect of this dimension involves protecting faculty from undue pressure from parents and officials (Heck, 1992; Heck, Marcoulides, & Lang, 1991). The leadership of high-performing schools was perceived by staff as more successful in this respect than the leadership of lower-performing schools serving a similar student body. This finding was particularly strong in high schools. Protection of this kind is not about being defensive—indeed, parent-school relationships, when assessed, were found to be more positive in high-performing schools. Rather, it is about allowing teachers to focus on their teaching while leaders mediate the messages that reach teachers from potentially disruptive lobby groups and parents.

A third aspect of Dimension Five involves conflict management. In one study, principal ability to identify and resolve conflict early, rather than allow it to fester, was strongly associated with student achievement (Eberts & Stone, 1986). The explanation may be that because effective conflict management builds trust in the school leadership, skilled conflict management increases leaders' ability to galvanize faculty around an improvement agenda. In schools where teachers and principals did not agree on the latter's conflict management skills, student academic performance was particularly low. This suggests wider problems of poor-quality feedback and communication between the principal and staff. Across these studies, the average impact of this leadership dimension on student achievement was 0.27, suggesting that this type of leadership makes a small but important difference to the achievement of students. This effect is very similar to that which Marzano, Waters, and McNulty (2005) derived from their meta-analysis for this leadership dimension. Creating a safe and orderly environment is foundational in that although orderliness is not sufficient for a high-quality learning environment, its absence makes the work of educating students practically impossible.

[A Student-Centered Perspective on Dimension Five](#)

The purpose of Dimension Five leadership is to create a school environment that promotes the willing engagement of students in their own learning. Student engagement has three aspects: behavioral, emotional, and cognitive (Wang & Holcombe, 2010). Attendance at school, presence in class, and participation in extracurricular activities are indicators of behavioral engagement. Students who are emotionally engaged identify with their school

and like at least some of their teachers, classes, and extracurricular activities. In Chapter Five, cognitive engagement was discussed in the context of a theory of effective teaching*. Students who are thinking about the concepts and skills they are supposed to be learning are cognitively engaged. Such thinking includes self-regulatory strategies such as thinking about what is supposed to be learned, planning how to complete learning tasks, and checking their own work. In a safe and orderly environment these three types of student engagement will be high, and that engagement will be associated with strong student learning (Wang & Holcombe, 2010).

A holistic rather than narrow disciplinary approach is required. A singular focus on behavioral engagement, when students are not motivated to learn what is being offered, is punishing for both staff and students. Although students come to school with dispositions that shape their likelihood of engagement, there is an increasing body of evidence that students' perceptions of their schooling are an additional powerful determinant of how they engage with school. This evidence helps leaders to identify school norms and practices that lift or suppress levels of engagement. On the whole, student engagement is increased by school experiences that fulfill their psychological need for competence, autonomy, and relatedness (Deci & Ryan, 2000). A sense of personal competence is fostered by student success in tasks and activities that are important to them. Learning opportunities that promote success involve well-structured activities that connect with students' prior experience and interests. Teachers also promote success by preventing repeated failure through their early detection and correction of students' misunderstandings (Chapter Five). Autonomy is promoted by school and class experiences in which students influence what and how they learn. This may involve making choices or, when choices are restricted, accepting the reasons teachers give them about why learning something is important (Absolum, 2006). A sense of autonomy is also fostered by teaching that enables students to regulate their own learning through knowledge of success criteria and of the progress they are making toward them.

Relatedness is about affiliation and trust. When students feel that teachers know and care about them, they feel more connected to the school, and their emotional engagement provides a platform from which teachers can more readily foster their cognitive engagement with tough intellectual work.

Because there is considerable overlap between the patterns of school organization and school climate that foster these three types of engagement, they will be considered together in the remainder of the chapter. Two broad leadership strategies for increasing engagement are discussed: increasing students' sense of physical and psychological safety at school and in the

classroom and increasing parent-school ties. The aim of both strategies is to foster students' engagement by meeting their need for competence, autonomy, and relatedness.

Increasing Engagement Through a Safe School Environment

The first step in increasing student engagement is to get students to school and in class. Although students' attendance reflects their health and what is happening at home, it is also responsive to what is happening at school. The importance of school-based explanations of attendance has been revealed by research showing that attendance rates vary widely across schools serving very similar communities and that these variations are partly explained by students' experience of the physical and psychological safety of the school environment (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010).

Leaders and teachers can test their assumptions about the safety of the school environment by asking students about their sense of security in hallways, in bathrooms, and on their way to and from school. Questions about bullying and intimidation can also be included in student surveys that give teachers valuable information about how students experience the school. School leaders who take such survey results seriously send strong signals to students about their commitment to creating a safe school and to judging safety by listening to students' voices. Rates of school violence also vary widely between schools that serve very similar communities, suggesting that, as for school attendance, school culture and organization are important influences.

A recent national study of violence in Israeli schools identified those schools whose rates of violence were atypical in the sense of being well above or well below what would be expected given the level of violence and deprivation in the communities they served (Astor, Benbenishty, & Estrada, 2009). The purpose of the study was to identify the factors within these atypical elementary, middle, and high schools that were responsible for the atypically high or low expressions of violence. In the low-violence schools, principals mobilized staff around a vision of a peaceful school that was linked to a wider educational and political vision of how diverse communities could live together. Their vision was inspirational precisely because it linked to community aspirations rather than community realities. The goal was not just tighter discipline and better behavior but a school community that demonstrated its political and social values by the proactive pursuit of a peaceful and diverse society.

The goal of a peaceful school was communicated to all members of the school community through appropriate cultural symbols, images, and text. Hallways

included students' posters about peace and quotes from respected leaders and photos of members of different ethnic communities working together. Such communication was not seen as authentic, however, unless the symbolic messages were matched by school policy and practices. In many high-violence schools such symbols were seen as window dressing because they were not matched by consistent action.

Leaders in peaceful schools turned their vision into reality by working with staff to develop policies and procedures that were consistently carried out. These were not just about violence prevention and remediation. Values of inclusion and respect for diversity were evident every day in one Arab school where students and teachers learned sign language so they could communicate with a large group of deaf students. They were evident in another Jewish school in the spontaneous inclusion of students with cerebral palsy in the playtime games of their classmates.

In high-violence schools, leaders addressed violent incidents through mass expulsions, heavy-handed searches, and intimidation. Although these tactics did succeed in reducing rates of severe violence, they also increased the sense of fear and intimidation. Management of violent incidents, in itself, does not increase students' sense of safety and security.

In peaceful schools, relationships were characterized by warmth and trust. Principals had a visible presence in hallways and courtyards, where they got to know and enjoy students personally. This was in stark contrast to the punitive or neglectful relationships found in high-violence schools. Caring for colleagues and students extended in peaceful schools to a whole-school responsibility for buildings and grounds.

In peaceful schools, all staff took responsibility for violence-prone spaces and times, including local bus stops and playing fields. In high-violence schools, trash, dilapidated buildings and classrooms, and multiple security devices communicated neglect, threat, and lack of pride.

Marginalized and disenfranchised students can experience such school environments as a sign of disrespect that reinforces their alienation from their school and its staff (Riley, 2007). Principals played a central role in achieving safe schools through their work in galvanizing adults around an attractive vision, putting the routines in place to make the vision a reality, and building relational trust across the whole school community. Their role was far wider than is acknowledged in some evidence-based violence-prevention programs, where it is typically limited to ensuring faithful implementation of the program (Astor, Benbenishty, & Estrada, 2009).

Student safety and security within classrooms is promoted by teaching that ensures high-quality opportunities to learn (Chapter Five). Students who are

faced day after day with work that they neither understand nor relate to will eventually stay away from the classroom or be disruptive. Sometimes teachers respond to disruption and irregular attendance by reteaching old material, simplifying the work, and restricting learning activities to individual seat work. A vicious cycle develops of increased student boredom and passivity leading to increased absence and disruption, which teachers may respond to with more emphasis on practice drills and basic skills. Teachers need skilled help from instructional leaders to break this cycle of dysfunctional teacher-student interaction. When teachers offer active learning opportunities and more student choice, student attendance increases and classroom disruption decreases.

“In general we know that children are more engaged in schooling when they feel in control of their own learning, are actively participating in the learning process, are interested in the topic being studied and are able to respond to the challenge before them. They are much less motivated by classes where they are cast in the role of passive recipients of knowledge to be delivered by the teacher” (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, p. 104). In short, curriculum and pedagogy that recognize students’ need for autonomy and competence increase engagement at school and in class. Even in the most well-run classes, peers can pose threats to students’ safety and well-being. For those students with low status in their peer group, peers can limit their access to the information and help they need to succeed in small-group activities. Without active teacher intervention, a partially hidden world of threats, name calling, obscenities, and racial abuse can thrive during group activities, even in classes in which behavioral engagement is high (Nuthall, 2007). Many instructional leaders, aware of this peer culture, ensure explicit teaching and enforcement of cooperative learning principles so that group activity supports the learning of all students.

Increasing Engagement Through Strong Parent-School Ties

Although the worlds of school and home may differ greatly, students will still thrive if there are enough bridges between them to make the crossing a walk into familiar rather than foreign territory. There are two sorts of bridges. One is built by leaders and teachers who know about, respect, and use the resources of the local community in their teaching and extracurricular activities. The other invites and supports parental involvement in the educational work of the school. Both types of bridge build strong parent-school ties. Schools with strong ties tend to have safer school environments, better

student attendance, and greater parent-school trust (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Epstein & Sheldon, 2002). These findings suggest that the leadership work of creating a safe and engaging school environment goes well beyond the school gate.

Building Ties Through the Curriculum

When we think about building stronger connections between home and school we tend to focus on how to inform and involve parents. But in this section I explain how such ties are also built by incorporating relevant aspects of student and community culture into their lessons. Although it is teachers who need to plan such lessons, leaders have an important role to play in ensuring, through their oversight of the curriculum, their analysis of student feedback, and their provision of teaching resources, that teachers are supported in making such connections.

There are sound pedagogical reasons for linking classroom learning with students' lives: A fundamental premise in instructional design is that one builds on the basic background knowledge, interests, and skills that students bring to the classroom. At the psychosocial level, a deep understanding of students' background represents a powerful resource for teachers as they seek to establish the interpersonal connections necessary to teach. At an instrumental level, good teachers draw on such background knowledge as they attempt to connect seemingly abstract academic topics to student lives. In this regard, knowing children well is essential to the effective design of classroom lessons that advance academic learning for all. [Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, p. 58]

In short, students are more motivated to learn if the lesson connects with their experience and interests. The connection makes the teacher more attractive and the material more comprehensible and relevant. The wider the gap between school and community cultures, the more important it is for teachers to make these connections. Making those connections does not require every teacher to have direct contact with their students' families. This would be an impossible goal for high school teachers, who see up to 120 students per day. The key to making such connections in the classroom lies in well-designed units of work that connect academic concepts with relevant cultural ideas, skills, and activities. For example, when indigenous perspectives are integrated into quality learning tasks, the achievement of indigenous students can improve markedly.

With the help of Yup'ik elders, teachers and researchers developed a series of culturally based mathematics curriculum modules for use in urban and rural

Alaskan schools. Evaluations found that the Yup'ik students performed significantly better in the culturally based modules, particularly in terms of their understandings of mathematical concepts and their ability to transfer new knowledge to real-life situations (Lipka et al., 2005). In large multicultural schools, there may be more than fifty different ethnic groups represented in the student body. Rather than expecting teachers to have curriculum-relevant knowledge about all such groups, it is more appropriate to focus on the attitudes and inquiry skills that enable teachers to learn, in context and as required, about how to make effective connections between the curriculum and cultural knowledge. It is the desire to make such connections and the provision of support for doing so that are important rather than the transmission of prepackaged information about students' cultures. Prepackaged information about "other cultural groups" or "other people's children" can contribute to stereotyped teacher views that impede the effective teaching of diverse students (Epstein, 2001). Rather than expecting teachers to be knowledgeable in the abstract about the cultures of their learners, the more appropriate expectation is that they learn enough about their students' lives to design learning activities, including homework tasks, that link academic concepts to culturally relevant practices (Mercado, 2001). The goal is that teachers and students become skilled at working between classroom and community cultures.

Building Ties Through Parental Involvement

There are many different ways of involving parents in their children's schooling, and on the whole, you reap what you sow. If leaders' efforts go into promoting parent involvement in the PTA or school governing body, then the consequences, assuming effective implementation, will be greater parental involvement in school events and school governance. There is little evidence of crossover effects—greater parental involvement in such activities does not typically lead to increased student achievement (Borman, Hewes, Overman, & Brown, 2003; Epstein, 2002).

If the purpose of engaging the community is educational benefit for children, then leaders' efforts should go into involving parents in ways that create a stronger educational partnership between the school and its parents because that is the strategy that is most likely to deliver the intended results. There is a complicating factor, however, and that is the issue of trust. Without trust building, all the parent evenings, newsletters, and cultural events in the world will yield disappointing results. Without trust building, leaders will not be able to break through the silence, defensiveness, face saving, or straight-out

hostility that may have thwarted previous efforts to engage the parental community. If leaders have the knowledge and skills required to build trust they not only will achieve stronger community-school relationships but also will have created a social foundation from which parents and teachers can work together to improve students' engagement and achievement. In Chapter Two, I introduced the idea of trust. It is worth reviewing it again in the context of what leaders can do to increase parents' trust of the school while seeking their greater involvement. Perhaps the most important thing to remember is that it is high-quality everyday interactions that build trust. Although participatory structures such as local school councils and special events may help, it is parents' judgments about how staff members treat them and their children that determine the level of trust. In a study on parent-school trust conducted in seventy-nine midwestern elementary, middle, and high schools, parents expressed large differences in their average level of trust of their school (Adams, Forsyth, & Mitchell, 2009). The differences were not explained by the differing characteristics of the schools' communities but by factors internal to the schools' culture and organization. First, schools that gave parents genuine opportunities to influence school and classroom decisions were perceived as more trustworthy. These types of collaboration signal that the school respects parents' knowledge of their own children and is willing to be influenced by it. Parental influence came from multiple opportunities for parents and teachers to discuss educational issues rather than from structures, such as local school councils, which gave parents formal authority. Second, greater parent trust was strongly associated with schools in which students themselves reported a strong sense of belonging to and valuing the school. When children agreed that "most of my teachers care about me" and "people in school are interested in what I have to say," their parents were much more likely to say that they trusted the school. This makes sense because children's reactions to school and their teachers are parents' most important source of information about the school. If their children feel cared for and like their teachers, parents are much more likely to trust the school.

The clear implication for school leaders is that one way to increase parent-school trust is to ensure a positive relationship between teachers and students. Although leaders do have considerable control over the conditions that promote trust, it is more easily achieved in some schools than others. It is easier in stable communities where parents and teachers can get to know one another and where parents have access to multiple sources of information about their school. It is harder in high schools where large size, subject-based teaching, and the increasing independence of children make it harder for teachers and parents to stay connected (Adams, Forsyth, & Mitchell, 2009).

Building trust in racially and culturally homogeneous communities is easier than in more diverse ones because people have a tendency to trust those they see as similar to themselves (Tschannen-Moran & Hoy, 2000). This is not a cause for guilt or blame but a reflection of the way social perception works. In more homogeneous communities and organizations, social similarities of race, ethnicity, and class provide grounds for an initial basis of trust and dissimilarities provide grounds for initial withholding of trust. This means that leaders of schools that serve culturally heterogeneous communities need to take more active steps to overcome mistrust. When parents are poor and teachers are seen as well off, when teachers are predominantly white and parents are predominantly Hispanic, more effort is required to grow trust. That effort should focus on improving the four qualities on which people make judgments of trustworthiness (Chapter Two). When high trust is combined with effective strategies for parental involvement in their children's education, then student attendance and achievement are likely to increase.

Effective Strategies for Increasing Parental Involvement in Their Children's Education

The three quotes from elementary principals that follow tell something of the challenges of increasing parental involvement and of how to overcome them. Principal: Real parental involvement in this school has been zilch. We have tried everything—reading mornings, maths mornings, free computer courses—some of these worked at first, but nothing really worked. They turn up for festivals and so on, but you can't get them involved in planning or curriculum sessions. [Benseman & Sutton, 2005, pp. 25–26] Principal: You know, I don't expect fifty parents to show up to a meeting about AYP because they don't care. But they do want to know about their child's reading ability and you know is my child doing well or is my child [not] doing well? . . . And let me say one thing about parent conferences. We pretty much get very close to 100 percent every time we have a parent conference. [Louis, Leithwood, Wahlstrom, & Anderson, 2010] Principal: So when I initially got here we had a PTA. We could never have a quorum. . . . I'm out and about and I talk to parents all the time. Why don't you come? Basically what we learned is they thought it was cliquish. So I wanted to dissolve the PTA and to dissolve a PTA you almost have to give them your first-born child. . . . Since I dissolved the PTA we use every last chair we've got for our meetings. It's whoever can help in whatever way is needed at any given time. So we have tremendous parental support in that regard. [Louis, Leithwood, Wahlstrom, & Anderson, 2010]

The first principal is ready to give up—a lot of staff time, effort, and money have gone into strategies that have not worked—or at least not lasted.

The second principal understands that the strongest motivation for parents' involvement is their own children, so that is her starting point for increasing her parents' involvement.

The third principal understands that when things are not working, the key to finding out why is to ask parents themselves—not a select few but a wide range. When repeated efforts to engage the community have not worked, one can understand why educators may blame the failure on parents. There is no doubt that some parent communities are harder to involve than others, but the level of involvement also reflects schools' strategies. Higher-quality programs attract more involvement, especially in interactive homework, volunteering, and school decision making (Sheldon & Van Voorhis, 2004). They also make an independent contribution to student achievement (Sheldon, 2003). A sustained program of research out of Johns Hopkins University on the characteristics and development of effective home-school programs provides good guidance about what leaders can do to develop high-quality parent-involvement programs (Epstein & Jansorn, 2004; Sheldon, 2005).

Develop a sustained and coherent program rather than a series of one-off initiatives. Plan to take about three years to develop a good program. Involve parents, teachers, and community leaders in oversight of the program so that the parties can share responsibility and be mutually accountable. Set goals that are linked to specific student needs, for example, improvements in aspects of student engagement and achievement. Embed the support of parental involvement in the school organization rather than contracting it out to specialist staff so that parents can learn from teachers and vice versa. It is strong parent-teacher and parent-leader relationships that increase trust and student engagement and achievement. If teachers are minimally involved, these relationships cannot develop. Work with community leaders and parents to locate resources that can help connect the curriculum to student and community cultures. Use evaluation data to progressively improve the program. Make regular substantive reports to the whole school community that acknowledge contributors and communicate the importance of this work, including its rationale, goals, and progress to date. Schools use a wide range of strategies to involve their parents in their children's learning. At elementary school levels, these strategies often involve after-school workshops or meetings with a focus on a particular area of the curriculum. With careful planning, the effects of such workshops can be considerable. Design characteristics that appear to be important include making student learning the primary focus of the program, providing parents with explicit information

and training (for example, modeling and reinforcing appropriate strategies for tutoring in reading), supplying materials for use at home, helping families access resources such as books, aligning school-home practices so that parents' actions support school learning, raising parents' expectations for their children's achievement, and using data on parent reactions and student progress to progressively improve the program.

At the high school level, involving parents in the academic guidance process, including providing early knowledge of curriculum pathways and their links to career choices, is, on average, more powerful than many other forms of involvement. Most parents who are not currently involved in their children's schooling would like to be, but are unsure about how to help. Their hesitation is well founded because certain types of help can have counterproductive effects. If, for example, parents try to help with homework by supervising, checking up, and generally controlling their children, the result is likely to be a negligible or even negative impact on children's attitudes and achievement (Patall, Cooper, & Robinson, 2008).

However, parental strategies that encourage study skills, such as setting clear homework rules and rewarding children accordingly, are more likely to be effective. It seems clear that expecting parents to help with reading or with homework, without assessing parents' readiness to do so, is unlikely to work for either parents or students. Similarly, expecting teachers to engage parents in educational activities without attending to their learning needs is also likely to be ineffective. If teacher involvement is to be productive, they also need appropriate support and professional development. The aim of such development should be to increase teachers' knowledge of the school's communities, their confidence in communicating with diverse parents about their children's progress, and their ability to locate and integrate community resources into their teaching programs.

Reflective Questions About Dimension Five Leadership

- Are students surveyed regularly about their attitudes toward the school and their learning?
- How thoroughly are the results of such surveys used for the purpose of improvement?
- Are student management policies explicitly linked to broader social values about a well-functioning community?
- How well does school leadership support teachers in using relevant community resources in their teaching?

- To what extent are parent-involvement efforts focused on increasing parental engagement with the educational work of the school?
- To what extent does school leadership coordinate and monitor the effectiveness of parent-involvement efforts?

Summary

Viewed from an educational rather than a managerial perspective, the work of creating a safe and orderly school is fundamentally about increasing the physical, emotional, and cognitive engagement of students by meeting their needs for caring relationships and for control over and success in their learning. Students' engagement with school, particularly their attendance, is strongly affected by whether they judge it to be physically and psychologically safe and whether they feel that most of their teachers care about them. It is also affected by the strength of parent-school ties. Strong ties are made by linking teaching programs with relevant community resources and by educationally focused parent involvement. Leaders play a central role in orchestrating a coherent and evidence-based approach to parent involvement and in building the trust that enables parents and teachers to work together to increase the engagement of all students.

* *Úr kafla 5 í bók Vivian Robinson, Student Centered Leadership*

Quality Teaching as Providing Opportunities to Learn

Both the quantity and quality of teaching are critical determinants of what students learn in classrooms. These two aspects of teaching effectiveness are captured in the idea of "opportunities to learn"—a concept developed by the educational psychologist David Berliner (1987, 1990).

In essence, high-quality teaching maximizes the time that learners are engaged with and successful in the learning of important outcomes. This concept provides a set of principles about teaching quality that have considerable practical relevance and do not prejudge the effectiveness of particular teaching styles or make simplistic use of student assessment data.

The central idea is how teachers use time allocated for particular subjects. In a forty-week school year about 160 hours are allocated for the teaching of a particular subject. There are numerous ways in which this allocated time can be eroded in terms of the quantity and quality of the learning opportunity. First, time can be lost through waiting for the learning activity to start because students or the teacher are late, because the resources are not yet available,

or because the transition between activities is badly managed. One indicator of quality teaching is that routines are in place to minimize such wait time.

Second, time can be lost through misalignment between important intended learning outcomes and the lesson activities. In a unit of work on insects, for example, a teacher provides multiple opportunities to learn the characteristics of insects, including an art lesson in which students are asked to “be creative” and “use their imagination” in painting their insects. The teacher provides positive feedback on this basis and makes no comments about paintings that depict creatures that are not insects. At a more mundane level, lesson activities can be misaligned because learners spend their time drawing headings, coloring diagrams, and guessing the correct answer on work sheets rather than developing the intended conceptual understandings.

Third, even though wait time is minimized and lesson activities and teacher feedback are carefully aligned to the intended outcomes, students may not engage with the activities. Students are **cognitively engaged** when they are actively thinking about the material. It is important that being behaviorally engaged or “on-task” is not taken by teachers or their evaluators as equivalent to being cognitively engaged. The latter is best assessed by asking students what they are trying to learn and how they will know when they have been successful.

Cognitive engagement may be low because the material may assume prior knowledge that the students do not have, or conversely, may present ideas that students already know. Learners may be disengaged because they do not feel emotionally connected with the material, with the teacher, or both. The fourth way in which time is lost is through persistent lack of success. Quality teaching provides learning opportunities that are not only aligned to important learning outcomes and well matched to students’ prior knowledge and interests, but also designed to promote success. This does not mean that all failure is to be avoided, because mastering important learning outcomes often requires considerable intellectual effort and persistence, and these are qualities that teachers should nurture.

A key to promoting success is early detection of students’ misunderstandings because such misunderstandings subvert the learning the teacher intends the students to gain from the lesson activities (Nuthall & Alton-Lee, 1993).

Teachers’ feedback to students should attend to the content of their understanding in addition to the correctness of their answers.

In summary, quality teaching involves maximizing the time that students spend engaged with and being successful in the learning of important outcomes.