

# CREATING A CLIMATE FOR LEARNING

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CLASSROOMS EVERYWHERE OFFER A DIVERSITY OF FACES AND shapes and sizes, but underneath the diversity, there are fundamental elements that all learners need in order to succeed and to feel positive about their experiences in school.

## WHAT DO LEARNERS NEED TO SUCCEED?

For students to succeed, they need to believe that they can learn and that what they are learning is useful, relevant, and meaningful for them. They need to know that they belong in the classroom and that they are responsible for their own learning and behavior. This develops a self-directed learner who is confident in making the information his or her own. This instills *self-efficacy*, which means believing in oneself. In *Education on the Edge of Possibility*, Caine and Caine (1997) state,

Teachers' beliefs in and about human potential and in the ability of all children to learn and achieve are critical. These aspects of the teachers' mental models have a profound impact on the learning climate and learner states of mind that teachers create. Teachers need to understand students' feelings and attitudes will be involved and will profoundly influence student learning. (p. 124)

Effective teachers believe that all students can learn and be successful. Effective teachers consciously create a climate in which all students feel included. Effective teachers believe that there is potential in each learner and commit to finding the key that will unlock that potential.

## CLASSROOM CULTURE AND LEARNING COMMUNITIES

Culture is often referred to as “the way we do things around here.” People who live and work in a culture sometimes can't explain or describe it, but they can certainly sense it. Culture may not necessarily be conveyed only through words, but also through actions. Sometimes what we do screams so loudly that we can't hear what is being said. In the words of DePorter, Reardon, and Singer-Nourie (1998), in their book *Quantum Teaching*, “Everything Speaks, Everything Always.” They caution teachers that what they do, say,

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and allude to have an effect on learners and their perceptions of success. According to Gregory and Parry (2006),

As far as the brain is concerned, actions speak louder than words. Everything that happens in the classroom is monitored by three parts of the brain, two of which have no spoken language but are very adept at reading body language and tone of voice. Every gesture, every inflection, and every invasion of personal space is monitored by the limbic system and evaluated in terms of its threat potential. These skills allowed our ancestors to survive and they are still alive and well in all of us. (p. 13)

Because the brain is a *parallel processor*, it absorbs information on a conscious and an unconscious level. The brain constantly performs many functions at the same time (Ornstein & Thompson, 1984). It therefore can manage to process thoughts, emotions, and perceptions simultaneously.

The brain is also a parallel processor in that it facilitates learning by involving both focused attention and peripheral perception. O'Keefe and Nadel (1978) state that the brain responds to the entire sensory context in which learning takes place. *Peripheral stimuli* include everything in the classroom, from the drab or colorful walls to subtle clues, such as a look or gesture, that conveys meaning and is interpreted by the brain. All sounds and visual signals are full of complex messages. A sarcastic remark can speak volumes to a sensitive learner, and a gesture can convey far more than the spoken word.

In his work with the Mid-continent Research for Education and Learning (McREL) group and with Dimensions of Learning, Robert Marzano (1992) examined the climate for learning, as did Jay McTighe (1990), with the Maryland State Department of Education:

Closely related to teachers' behavior is the development of a classroom climate conducive to good thinking . . . students cannot think well in a harsh, threatening situation or even in a subtly intimidating environment where group pressure makes independent thinking unlikely. Teachers can make their classrooms more thoughtful places by demonstrating in their actions that they welcome originality and differences of opinion.

Noted researcher Deborah Rozman (1998) remarked that "the neural information the heart sends to the brain can either facilitate or inhibit cortical function, affecting perception, emotional response, learning, and decision making." The heartbeat of another person is perceivable within 3 to 4 feet, because of the electromagnetic field that it projects. The heartbeat of one person registers in the brainwaves of another person. There are intuitive or gut feelings that are picked up by neurons throughout the body. It has often been said, "People need to know you care before they care what you know." And old adages become just that because they are usually true.

As part of his choice theory of motivation, William Glasser (1990, 1998) cites five equally important needs:

- The need to survive and reproduce
- The need to belong and love
- The need to have some power

- The need to have freedom
- The need to have fun

This is also evident in Abraham Maslow's (1968) well-known hierarchy of needs, which includes the following, beginning with the most basic:

- Physiological needs: food, water, air, shelter
- Safety needs: security, freedom from fear, order
- Belongingness and love: friends, spouse, children
- Self-esteem: self-respect, achievement, reputation
- Self-actualization: becoming what the individual has the potential to become

Human beings generally move up the hierarchy from basic to complex needs. As each need has been met, it becomes less of a motivator as the person focuses on the next level.

As we examine motivators, we need to remember that basic needs have to be met first for students. We recognize that all humans have a very strong need to be liked and included. Classrooms everywhere must foster an inclusionary climate. It is essential that students bond with one another and with the teacher to form a positive learning community. Dr. Robert Sapolsky (1998), professor of biological sciences and neuroscience at Stanford University, states that we can minimize the impact of stress by building a supportive environment:

Put an infant primate through something unpleasant: it gets a stress-response. Put it through the same stressor while in a room full of other primates and . . . it depends. If those primates are strangers, the stress-response gets worse. But if they are friends, the stress-response is decreased. Social support networks—it helps to have a shoulder to cry on, a hand to hold, an ear to listen to you, someone to cradle you and to tell you it will be okay. (p. 215)

Some teachers with their students cooperatively develop classroom “agreements” (Gibbs, 1995), “Trust Statements” (Harmin, 1994), or “rules to live by” to help students feel that they have a voice in the running of the classroom. These rules also help students become more emotionally intelligent and responsible learners. Students in small groups generate statements that they believe the class should live by, for example, “Everyone’s ideas count.” After the groups share their statements, the class combines, deletes, or adds sentences until consensus is reached and students feel comfortable and can support these rules to live by, which may include the following:

- There is no wrong opinion.
- No put-downs or sarcasm here.
- Everyone must be heard.
- Mistakes are learning points.

If these statements are posted for all students to see and reflect on, students will monitor and honor the rules that they have created.

We also recognize that learning communities foster links between heart and mind. Driscoll (1994) asks us to consider the following:

Community is the entity in which individuals derive meaning. It is not so much characterized by shared space as it is by shared meanings. Community in this view is not a mere artifact of people living (or working or studying) in the same place, but is rather a rich source of living tradition. (p. 3)

## EMOTIONS AND LEARNING

Students living in fear cannot learn. The phenomenon of “downshifting,” “the psychophysiological response to threat associated with fatigue or perceived helplessness” (Caine & Caine, 1997, p. 18), suggests that students will not attend to learning if their major concern is safety. This analogy is helpful in planning, so that we challenge students in ways appropriate to their skill levels without overstressing them. Some students may already be so stressed from difficult situations in their personal lives that they are unable to fully attend to lessons, as they are on “high alert” (Gregory & Parry, 2006).

Safety in classrooms means intellectual safety as well as physical safety. During stress, the emotional centers of the brain take control of cognitive functioning, and thus the rational, thinking part of the brain is not as efficient, and this can cause learning to be impeded. If students are living daily with the threat of being ridiculed or bullied, they cannot give their full attention to learning. Students who are challenged beyond their skill levels are more concerned about being embarrassed or laughed at than with the quest for learning. They will not be motivated to attempt the challenge if they aren’t able to imagine or perceive success.

In classrooms where the teacher does not adjust the learning to the students’ levels of readiness and teaches only to the “middle,” some students will be bored from lack of challenge, and others may be placed under undue stress from too great a challenge. Thus, teachers need to consider where their learners are in relation to the learning goal and plan learning experiences just beyond the skill level of each student.

All students are more likely to be engaged in the learning, rise to the challenge, and have a sense of self-confidence as they approach the task if they feel that they have a chance to succeed. Thus, once the levels of readiness have been considered (although it is unrealistic to consider each learner individually), students can often be grouped and experiences designed to accommodate the learners at their levels of understanding.

Teachers need to consider the degree of complexity of learning tasks so that they will be challenging but not overwhelming. This establishes the state of “flow” (Csikszentmihalyi, 1990), the condition that exists when learners are so engaged, excited about learning, challenged, and receiving appropriate feedback that they are oblivious to anything else. Students are at their most productive and most creative in this state:

People seem to concentrate best when the demands on them are a bit greater than usual, and they are able to give more than usual. If there is too little demand on them, people are bored. If there is too much for them to handle, they get anxious. Flow

occurs in that delicate zone between boredom and anxiety. (Goleman, 1992, as cited in Csikszentmihalyi, 1990, p. 4)

Renate Caine, a well-known pioneer in the field of brain-based education, proposes that there are three basic elements to brain/mind learning and teaching:

- Emotional climate and relationship or relaxed alertness
- Instruction or immersion in complex experience
- Consolidation of learning or active processing

Emotional climate and relationships are important in producing what Kohn (1993) refers to as “relaxed alertness”:

All the methodologies that are used to orchestrate the learning context influence the state of relaxed alertness. It is particularly important for educators to understand the effect of rewards and punishments on student states of mind. Research shows most applications of reward and punishment in the behavioral mode inhibit creativity, interfere with intrinsic motivation, and reduce the likelihood of meaningful learning. (as cited in Caine & Caine, 1997, p. 123)

Rewards and punishments tend to lessen the chances of self-motivation and an appreciation of learning as its own reward. Five practical alternatives to using rewards are the following:

- Eliminating threat
- Creating a strongly positive climate
- Increasing feedback
- Setting goals
- Activating and engaging positive emotions (Jensen, 1998b, p. 68)

It is important, if not imperative, that students feel good, have success, have friends, and celebrate their learning:

Emotions affect student behavior because they create distinct, mind-body states. A state is a moment composed of a specific posture, breathing rate, and chemical balance in the body. The presence or absence of norepinephrine, vasopressin, testosterone, serotonin, progesterone, dopamine, and dozens of other chemicals dramatically alters your frame of mind and body. How important are states to us? They are all that we have; they are our feelings, desires, memories, and motivations. (Jensen, 1998b, p. 75)

The emotional environment interacts with instruction and influences how information is consolidated. If “downshifting” occurs, the high stress/threat response sabotages connections and thus learning cannot take place. At this point, we are fortunate if even memorization of isolated facts and programmed skills is possible. It is almost impossible for higher-order thinking to take place.

If students think that success isn't possible because the task is too difficult or instructions for a task are ambiguous and not understood, they feel uncertain. These situations cause the learner to form a negative state, and the learner ceases to persevere. Alternately, classrooms that create "eustress" or a state of "flow" create a positive learning environment. Classrooms that embed choices in learning and routines that demonstrate mutual respect are supportive learning environments for students.

## EMOTIONAL INTELLIGENCE

*Emotional intelligence* is a person's ability to use his or her emotions intelligently. It involves maintaining a balance between reason and emotion. Daniel Goleman (1995) organizes emotional intelligence as a set of emotional competencies that occur in five domains.

### Self-Awareness

*Self-awareness* is one's ability to sense and name a feeling when it happens and also to put it into words. Self-aware people can use appropriate strategies to deal with their moods by sharing frustrations with others or seeking support on a bad day. Teachers should encourage students to articulate their feelings and seek and give support. Self-awareness is also being in touch with feelings, not letting feelings become engulfing, and having strategies to cope with moods. In her book *Molecules of Emotion*, Candace B. Pert (1998) suggests, "Feeling low and sluggish? Take a walk. Feeling anxious and jittery? Run!" (p. 293). We all need to find ways to change and manage our moods once we recognize what they are.

### Managing Emotions

*Managing emotions* is an outcome of recognizing and labeling feelings. It is the ability to calm and soothe during anxious moments or to manage and deal with anger. Using "teachable moments" (when an inappropriate emotional response has been given), teachers can help students learn problem-solving skills to generate appropriate alternatives to the feelings. Conflict resolution is easier if students have a repertoire of strategies for dealing with conflict when it erupts.

### Self-Motivation

*Self-motivation* consists of competencies such as persistence, setting one's own goals, and delaying gratification. Many students give up very easily when difficulties occur. Students need to feel hopeful even in the face of setback. The state of "flow" is an integral component of this domain. If students and teachers can create that state of high challenge and low threat, more learning can take place.

### Empathy

*Empathy* is being able to feel for another. Teachers can ask students to "stand in the other person's shoes." These people may be classmates in a situation that calls for empathy. They may be characters in fiction or history with whom students can empathize

to understand their emotions. This allows the students to feel how the character or individual might have felt. Understanding another's point of view or perspective is often a standard targeted in many districts. Feeling for others builds tolerance and understanding.

## Social Skills

*Social skills* are the competencies that one uses to “read” other people and manage emotional interactions. People with high levels of social competencies have the ability to handle relationships well and are able to adapt to a variety of social situations. They are said to have “social polish.” Teachers modeling these competencies and labeling them when seen in the classroom show the value of emotional intelligence in personal interactions.

The Emotional Intelligence Chart (see Figure 1.1) defines the five domains of emotional intelligence. It also gives suggestions for fostering each intelligence and some strategies for classroom applications.

<b>Figure 1.1</b> Emotional Intelligence Chart		
<b>Intelligence</b>	<b>To Foster</b>	<b>Strategies for Application</b>
<b>Self-awareness:</b> One's ability to sense and name a feeling when it happens	Help students discuss their feelings in different situations.	Reflection Logs and journals
<b>Managing emotions:</b> Recognizing and labeling feelings and responding appropriately	Use “teachable moments” to help students learn to manage emotions.	Deep breathing Counting to 10 Taking time out Physical movement
<b>Self-motivation:</b> Competencies such as persistence, goal setting, and delaying gratification	Help students find a niche. Help them to persist in difficult or challenging situations.	Goal setting Persistence strategies Problem solving
<b>Empathy:</b> Ability to feel for another person	Encourage students to “stand in another's shoes.” Think about another person's pain.	Modeling empathy Discussing empathic responses to persons studied
<b>Social skills:</b> Competencies that one uses to “read” and manage emotional interactions	Teach social skills explicitly. Have students practice social skills while doing group tasks.	Modeling social skills Using explicit language to describe behaviors, so students can practice the skills

## CLASSROOM CLIMATE

### Learning Atmosphere

In a differentiated classroom, all students feel safe and secure enough to take risks and express their understanding or lack of understanding. Many times, the students considered academically gifted feel that they are expected to know all the information. Often these learners pretend to have all the answers in response to the expectations of others. This can cause stress and interfere with learning. A disappointed look or comment can keep the gifted student from expressing a lack of understanding. This student, as well as others, should feel secure in the classroom even when he or she doesn't have all the answers.

The learner who is considered to be at risk or low achieving often lives up to the expectations of the label. Giving a student a look of surprise when he "gets it" shows that he is not expected to get it! Often this puts a cap on potential. Students live up to our expectations.

In a differentiated classroom, the emphasis is on knowledge base and experience rather than IQ and ability. Each student is respected. Learners know that learning is a process and everyone learns differently. Learning includes weeding out what students know with an effective pre-assessment and determining what students need next. This policy establishes a different mind-set of being able to admit mistakes, accept lack of understanding, and celebrate successes and growth in an individual's knowledge base. Each moment of successful improvement makes a positive change for a lifetime.

### Physical and Emotional Atmosphere

The climate is influenced by the physical attributes of the classroom. Things such as appropriate lighting, cleanliness, orderliness, and displays of students' work contribute to a positive atmosphere. Plentiful and appropriate resources are necessary to facilitate student success. There could be computers and materials that allow for hands-on manipulation. There should be opportunities for social interaction and intellectual growth.

Enriched environments are created not only by materials but also by the complexity and variety of tasks and challenges and feedback (Caine & Caine, 1997; Jensen, 1998b). Engaging materials and activities help to develop *dendritic growth*, the neural connections that are facilitated by experiences and stimulation (Diamond & Hopson, 1998; Green, Greenough, & Schlumpf, 1983; Healy, 1992). As Dr. Arnold B. Scheibel, professor of neurology at UCLA, suggests,

On the basis of what we know and have seen from animal experiments, it seems a likely inference that the same phenomenon in rats, mice, cats, and monkeys holds for humans, as well: Increase the level of environmental stimulation and challenge, and you will increase the branching of the dendrites and the thickness of the human cortex. (as cited in Diamond & Hopson, 1998, p. 35)

This growth is stimulated by a variety of complex and intriguing activities, as previously noted by Renate Caine (as cited in Healy, 1992): "If we encourage children to make choices from a selected variety of available challenges, both environmental and intellectual, we are no doubt following the wisest course" (p. 72).



## Use of Music

Another component for enhancing classroom climate may be the inclusion of music. Researchers at Strathclyde University have discovered that brainpower soars when students listen to stimulating pop tunes, and they advise that playing the latest hits in classrooms may actually increase student achievement.

This study by Dr. Brian Boyd and Katrina Bowes (*The Brain in the News*, Dana Press, 2001) researched the effects of music after learning about studies in Russia that discovered that medical patients who listened to music recovered faster. In contrast to the belief that only classical music calms the learner, they found that modern music with the same tempo as classical (60 beats per minute) has the same effect and makes the mind more receptive to learning. This music can actually help the brain retain information.

Many teachers who have tried using pop music report higher levels of concentration by their students. Pop music triggers the autonomic nervous system, and we respond by feeling good and tapping our feet to the music. The pupils of the eyes dilate, and endorphin levels and energy rise. Teachers often say that students will learn more in a class if they are enjoying the experience, and music can set the stage for learning. Students will link a known routine with a piece of music and thus be ready for what is to follow. The music can be playful, for example, playing Marvin Gaye's "I Heard It Through the Grapevine" while students are estimating the number of raisins in a small, lunch-size box. Or the music can appeal to the emotions and create a mood, as happens when listening to "When Johnny Comes Marching Home Again" at the beginning of a discussion of World War I or "War," by Bruce Springsteen, in relation to the study of the Vietnam War.

Music energizes people and masks "dead air" when there is a "dip" in the energy level of students. Mozart's music or Baroque music can soothe and calm as well (Campbell, 1998).

## Laughter and Celebrating Learning

Laughter is another tool to use in classrooms. It punctuates learning by releasing neurochemical transmitters called *endorphins*, and it is said to be the shortest distance between two people. Laughter even helps the immune system to increase the number of type T leukocytes (T cells) in the blood. T cells combat damage and infection, and some researchers have even dubbed them "happiness cells" (Cardoso, 2000). It makes sense to include humor and laughter and to celebrate learning in the classroom. Teachers can encourage students to applaud one another and cheer for each other's successes. Using energizing cheers (Burke, 1993; DePorter et al., 1998), students give rounds of applause, high fives, and other cheers that students can often create for themselves. These cheers also include actions to supplement the aural responses. Kinesthetic actions help energize students by sending more oxygen and glucose to the brain and often result in fun and laughter to raise endorphins.

Celebrating learning is important for students of all ages. A simple way to celebrate any classroom success is to lead an energizing cheer. When an individual or small group has a "lightbulb moment" or presents what has been learned, give a cheer. Besides the emotional boost, these cheers provide a physical boost to the brain. The physical actions send oxygen and glucose to the brain when arms are raised over the head and the body moves.

The following are some examples of cheers that energize and celebrate. Add your own physical movements to punctuate the cheer:

- Yes!
- Triple Yes!!!
- Oh, Yes!
- Ketchup Clap
- Fish Clap
- Table Rap Clap
- Happy Clam Clap
- Wah Hoo
- Awesome
- WOW
- Microwave
- Standing Oh!
- You Did It
- High Five
- Excellent Guitar
- Round of Applause
- You are great and getting greater!

Although each learner in the classroom is very different, everyone needs to feel safe and comfortable. In classrooms, climate and atmosphere play an important part in the learning process. Anything teachers can do to create a risk-free supportive environment where students can feel safe and where they can thrive needs to be considered and implemented in classrooms. Building a community of learners who care for and support one another is essential in a differentiated classroom. Students who know and respect each other are more tolerant of differences and more comfortable when tasks are different. Even though “one size doesn’t fit all,” learners require all these conditions to succeed.

# Chapter 1 Reflections

1. How would you describe your classroom climate?
2. How do you encourage team building throughout the year?
3. What do you do to create an atmosphere where students can take intellectual risks in your classroom?
4. How do you create intellectual safety and prohibit ridicule, put-downs, and other negative responses in your classroom?

5. How much wait time do you allow for thinking and answering questions?

6. What steps will you take to create an inclusive atmosphere where students feel safe and included?

7. How is "relaxed alertness" created?

8. How can you create "flow"?