## *Implications of This Research*

What are the implications of the findings on climate for teaching and learning? The first is that learning doesn't happen in a vacuum but in a course and classroom context where intellectual pursuits interface with socioemotional issues. The second is that climate works in both blatant and subtle ways, and many well-intentioned or seemingly inconsequential decisions can have unintended negative effects with regard to climate. Finally, as instructors, we have a great deal of control over the climate we shape, and can leverage climate in the service of learning once we understand how and why it influences student learning. Because of the connections between classroom climate and student development, many of the strategies that help foster a productive climate also encourage student development. The next section offers many such strategies.

## WHAT STRATEGIES DOES THE RESEARCH SUGGEST?

Here are a number of strategies that may help you encourage student development and create a productive classroom climate. Most of these strategies work toward both goals, reinforcing our claim that student development must be considered in the context of the course environment.

## *Strategies That Promote Student Development and Productive Climate*

**Make Uncertainty Safe**   For those students who are comfortable in black and white worldviews, there can be an emotional resistance to intellectual development, and it might be important to support them in dealing with ambiguity. There are various

ways to do this. Validate different viewpoints, even unpopular ones. Explicitly let students know that part of critical thinking is to embrace complexity rather than oversimplify matters. Explain that even though it might seem frustrating, the point of classroom discussions is not to reach consensus but to enrich everybody's thinking. Model this attitude in your disciplinary context.

**Resist a Single Right Answer**    Textbooks present information very linearly, but knowledge is generated and contested over time. If you want students to be in dialogue with the texts in your discipline, create a structure that can support it. You can ask students to generate multiple approaches to a problem or debate a devil's advocate position. Ask them to articulate their perspective before you volunteer yours so as not to bias them. When appropriate, use assignments with multiple correct solutions.

**Incorporate Evidence into Performance and Grading Criteria** If you want students to support their opinions with evidence, use rubrics and other tools to scaffold this practice. You can educate students to use the rubric by asking them to read each other's work and circle the pieces of evidence to highlight them visually. Incorporating evidence in your grading scheme will also reduce "grade grubbing" based on the notion that personal opinions are subjective and cannot be graded fairly.

**Examine Your Assumptions About Students**    Because assumptions influence the way we interact with our students, which in turn impacts their learning, we need to uncover and at times question those assumptions. It is common for instructors to assume that students share our background and frames of reference (for example, historical or literary references). It is equally common to make assumptions about students' ability (for example, Asian

students will do better in math), identity and viewpoint (for example, students share your sexual orientation or political affiliation), and attributions (for example, tentative language indicates intellectual weakness). These assumptions can result in behaviors that are unintentionally alienating and can affect climate and students' developing sense of identity.

**Be Mindful of Low-Ability Cues**   In their efforts to help students, some instructors inadvertently send mixed messages based on assumptions (for example, "I'll be happy to help you with this because I know girls have trouble with math"). These cues encourage attributions focused on permanent, uncontrollable causes like gender, which diminish students' self-efficacy. Instead, it is more productive to focus on controllable causes, such as effort (for example, "the more you practice, the more you learn"). A "throw away" comment on an instructor's part can send an unintended but powerful message that may saddle students' identity with negative perceptions related to their group membership and influence their perception of the course climate.

**Do Not Ask Individuals to Speak for an Entire Group**   Minority students often report either feeling invisible in class or sticking out like a sore thumb as the token minority. This experience is heightened when they are addressed as spokespeople for their whole group, and can have implications on performance (for example, if they become nonengaged, angry, or combative). These emotions can disrupt students' ability to think clearly, be logical, solve problems, and so on.

**Reduce Anonymity**   Creating an effective learning climate often includes making students feel recognized as individuals, both by the instructor and by peers. Making an effort to learn students' names, providing opportunities for students to learn each others'

names, inviting students to office hours, going to a student's theater production or sports event, and so on, can help to break down the barriers created by large classes.

**Model Inclusive Language, Behavior, and Attitudes**  Just as instructors operate under a set of assumptions that may or may not be true, so do students. Addressing these assumptions (for example, that we all share a common heritage, set of experiences, or goals) by modeling inclusiveness can provide a powerful learning experience for all students. For instance, avoid using masculine pronouns for both males and females or, when you use American idioms, explain them for the benefit of non-native English speakers. These types of behaviors can "catch on" in a classroom and create a climate that is welcoming to all rather than demotivating to some who do not feel represented or validated. Feeling included and not marginalized is essential for the development of a positive sense of identity.

**Use Multiple and Diverse Examples**  Multiple examples are important if students are to understand that theories and concepts can operate in a variety of contexts and conditions, and they also increase the likelihood of students relating to at least some of them. So, for instance, plan examples that speak to both sexes, work across cultures, and relate to people from various socioeconomic statuses, traditional age as well as adult returning students. This simple strategy can help students feel connected to the content, that they belong in the course or field, and reinforce their developing sense of competence and purpose.

**Establish and Reinforce Ground Rules for Interaction** Ground rules can help to assure that peers are being inclusive and respectful in order to create an effective learning climate and promote students' development. To generate maximal buy-in

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for the ground rules, you can involve students in the process of establishing them. See Appendix E for an example of such a process. Of course, you will still need to occasionally reinforce the ground rules and correct students for the occasional noninclusive behavior or disrespectful comment.

**Make Sure Course Content Does Not Marginalize Students**
Think about whether certain perspectives are systematically unrepresented in your course materials (for example, a course on family focusing only on traditional families, or a course on public policy ignoring race issues). Neglecting some issues implies a value judgment, which can alienate certain groups of students, thus impeding their developing sense of identity.

**Use the Syllabus and First Day of Class to Establish the Course Climate** First impressions are incredibly important because they can be long-lasting. Your students will form impressions about you and the course on the first day, so set the tone that you want to permeate the semester. Think through how to introduce yourself and the course. How will you balance establishing your competence and authority with coming across as supportive and approachable? What kind of icebreaker can help students get to know each other and become comfortable with you and the course while engaging the content meaningfully?

**Set Up Processes to Get Feedback on the Climate** Because some alienating attitudes, behaviors, and language function under the surface (that is, they are subtle), it is not always easy to get a sense of whether everyone in the class feels equally valued, accepted, heard, and so on. You can continually monitor the climate—particularly in courses dealing with sensitive issues—by asking student representatives who meet with you on a regular

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basis to share feedback from the class, or through an early course evaluation that specifically asks about climate issues. You can also videotape yourself or ask a third party (a TA, a teaching center consultant, a colleague) to sit in on your class and collect data on your interactions with students. Indicators to monitor can include noticing which groups are called on, interrupted, asked less sophisticated questions, or given acknowledgment for their contributions more than other groups.

**Anticipate and Prepare for Potentially Sensitive Issues**   We usually know from our own or our colleagues' past experiences what issues seem to be "hot topics" for some of our students. Preparing students to learn from these opportunities requires careful framing (for instance, an acknowledgment that the topic can have personal significance for many students and also an articulation of the expectations for the tone of the discussion), an explanation for why the course is dealing with the issue (for instance, the necessity to hear all sides of the debate to arrive at a multifaceted understanding), and ground rules (see above) that assure a civil discussion.

**Address Tensions Early**   If you are closely monitoring the climate and it becomes apparent that you or others are inadvertently shutting people out, marginalizing others, "pressing someone's button," and so on, address the issue before it gets out of hand. This may mean apologizing for yourself or others, if warranted (for example, "I'm sorry if some of you interpreted my comment as ..."), taking a student aside after class to explain the impact of a comment, explicitly discussing the tension (for example, "Some people believe it racist to say ..."), or delving into the issue through a series of questions (for example, "What are other ways people might perceive that statement?"). Remember

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that college students are learning to manage their emotions and sometimes don't know how to express them appropriately. In these cases, you might want to discuss intent versus impact (for example, "You probably did not mean this, but some people might interpret your comments as sexist because …"). This strategy protects students who make unsophisticated comments so that they do not shut down and foreclose further development, while acknowledging the frustration of the rest of the class.

**Turn Discord and Tension into a Learning Opportunity** Students need to learn that debate, tension, discord, and cognitive dissonance are all opportunities to expand one's perspective, delve deeper into a topic, better understand opposing views, and so on; hence, we need not avoid them. However, because college students are still developing social and emotional skills, these can often overshadow intellect, logic, and rational thinking. As a result, we need to work to continually shape our classroom climate. So do not foreclose a discussion just because tensions are running high; rather, funnel those emotions into useful dialogue. For example, you might ask students to take on another perspective using a role play, take a time out (for example, write their reactions down so that they are more useful and constructive), or simply explain how and why discomfort and tension can be a valuable part of learning.

**Facilitate Active Listening** Sometimes tensions arise because students are not hearing what others are saying. To build this important skill and enhance classroom interactions, you might ask students to paraphrase what someone has said, followed up by a series of questions as to whether their perception was inaccurate or incomplete. You can also model this skill yourself by paraphrasing a student's response and then asking whether you captured their perspective accurately.

## SUMMARY

In this chapter, we have argued that we need to consider students holistically as intellectual, social, and emotional beings. We have reviewed the research that documents how students are still developing in all these areas and in their sense of identity, and we have documented how their level of development can influence learning and performance. Likewise, we have argued that we need to look at our classrooms not only as intellectual but also social and emotional environments, and we have shown that all these facets of the course climate interact with student development and impact learning and performance. We also have shown that although instructors can only encourage development, they can have a great impact on the course climate. Our hope is that instructors can be more intentional in how they shape their course's climate and, consequently, student learning.