## Locus, Stability, and Controllability

Attributions vary in three underlying ways: locus, stability, and controllability. Locus of attribution is the location (figuratively speaking) of the source of success or failure. If you attribute a top mark on a test to your ability, then the locus is internal; if you attribute the mark to the test's having easy questions, then the locus is external. The stability of an attribution is its relative permanence. If you attribute the mark to your ability, then the source of success is relatively stable— by definition, ability is a relatively lasting quality. If you attribute a top mark to the effort you put into studying, then the source of success is unstable—effort can vary and has to be renewed on each occasion or else it disappears. The controllability of attribution is the extent to which the individual can influence it. If you attribute a top mark to your effort at studying, then the source of success is relatively controllable—you can influence effort simply by deciding how much to study. But if you attribute the mark to simple luck, then the source of the success is uncontrollable—there is nothing that can influence random chance.

	Γ	Stability Dimension	
		Unstable Cause (temporary)	Stable Cause (permanent)
Internal- External Dimension	Internal Cause	Effort Mood Fatigue	Ability Intelligence
	External Cause	Luck Chance Opportunity	Task difficulty

As you might suspect, the way that these attributions combine affects students' academic motivations in major ways. It usually helps both motivation and achievement if a student attributes academic successes and failures to factors that are internal and controllable, such as effort or a choice to use particular learning strategies (Dweck, 2000). Attributing successes to factors that are internal but stable or controllable (like ability), on the other hand, is both a blessing and a curse: sometimes it can create optimism about prospects for future success ("I always do well"), but it can also lead to indifference about correcting mistakes (Dweck, 2006), or even create pessimism if a student happens not to perform at the accustomed level ("Maybe I'm not as smart as I thought"). Worst of all for academic motivation is attributions, whether stable or not, related to external

factors. Believing that performance depends simply on luck ("The teacher was in a bad mood when marking") or on the excessive difficulty of material removes the incentive for a student to invest in learning. All in all, then, it seems important for teachers to encourage internal, stable attributions about success.

## **Influencing Students' Attributions**

How can they do so? One way or another, effective strategies involve framing teachers' own explanations of success and failure around internal, controllable factors. Instead of telling a student: "Good work! You're smart!" try saying: "Good work! Your effort really made a difference, didn't it?" If a student fails, instead of saying, "Too bad! This material is just too hard for you," try saying, "Let's find a strategy for practicing this more, and then you can try again." In both cases, the first option emphasizes uncontrollable factors (effort, difficulty level), and the second option emphasizes internal, controllable factors (effort, use of specific strategies).

Such attributions will only be convincing, however, if teachers provide appropriate conditions for students to learn—conditions in which students' efforts really do pay off. There are three conditions that have to be in place in particular. First, academic tasks and materials actually have to be at about the right level of difficulty. If you give problems in advanced calculus to a first-grade student, the student will not only fail them but also be justified in attributing the failure to an external factor, task difficulty. If assignments are assessed in ways that produce highly variable, unreliable marks, then students will rightly attribute their performance to an external, unstable source: luck. Both circumstances will interfere with motivation.

Second, teachers also need to be ready to give help to individuals who need it even if they believe that an assignment is easy enough or clear enough that students should not need individual help. Readiness to help is always essential because it is often hard to know in advance exactly how hard a task will prove to be for particular students. Without assistance, a task that proves difficult initially may remain difficult indefinitely, and the student will be tempted to make unproductive, though correct, attributions about his or her failure ("I will never understand this," "I'm not smart enough," or "It doesn't matter how hard I study").

Third, teachers need to remember that ability—usually considered a relatively stable factor—often actually changes *incrementally* over the long term. Recognizing this fact is one of the best ways to bring about actual increases in students' abilities (Blackwell, Trzniewski, & Dweck, 2007; Schunk, Pintrich, &

Meese, 2008). A middle-years student might play the trumpet in the school band at a high level of ability, but this ability actually reflects a lot of previous effort and a gradual increase in ability. A second-grade student who reads fluently, in this sense may have a high current ability to read; but at some point in the distant past that same student could not read as well, and even further back he may not have been able to read at all. The increases in ability have happened at least in part because of effort. While these ideas may seem obvious, they can easily be forgotten in the classroom because effort and ability evolve according to very different time frames. Effort and its results appear relatively immediately; a student expends effort this week, this day, or even at this very moment, and the effort (if not the results) are visible right away. But ability may take longer to show itself; a student often develops it only over many weeks, months, or years.