

“If at First . . . ”: Attribution Theory in the Classroom



Students will be better learners if they believe success depends on effort more than on luck or ability.

To gain predictability and control, humans seek to understand why things happen. If we find out why we were successful, we may be able to repeat that success. More important, perhaps, if we determine what caused our failure, we may avoid it in the future (Heider 1958, Kelley 1967, Weiner 1980).

Arising from social psychology, attribution theory is concerned with our constant search for the causes of our successes and failures. To what cause do we attribute what happens to us? Our *perceptions* of causality, rather than reality, are critical because they influence self-concept, expectations for future situations, feelings of potency, and subsequent motivation to put forth effort. While other factors may affect a person's intent to put forth effort, perceptions of causality constitute an important stimulant to motivation.

Three Continuums of Causality

In our culture (other cultures differ) we attribute success and failure to four factors: native ability, effort, task difficulty, and luck (Frieze 1976). Native ability and effort have been found to be the most dominant factors. These four attributions exist on three continuums: locus, stability, and controllability (Weiner 1979).

1. *Locus*. Feelings of self-esteem, shame, or guilt are based on one's perception of the location of the cause. Locus can be internal or external: "me" or "not me."

<i>Internal—"me"</i>	<i>External—"not me"</i>
Native Ability	Task difficulty
Effort	Luck

If we attribute success or failure to internal locus, we are the originators of what happens rather than pawns controlled by outside forces. As an originator, a person feels proactive rather than reactive to the environment. Attribution of success to internal locus (ability, effort) results in increased self-esteem. Attribution of failure to internal locus results in shame (lack of ability) or guilt (lack of effort) (Wong and Weiner 1981).

People often explain success in terms of "I" and failure by "they" (Weiner 1979). In athletic contests, the winners explain their victory by "our skill," and the losers justify their defeat because of "poor officiating" or "luck." Parents explain their child's success by "our parenting and sacrifices" and their child's failures by "poor schools" and "bad companions." Teachers explain success by "our efforts" and failure by "that class." Clearly, these attributions help us maintain our self-esteem.

On the other hand, attributions to the "not me" can be valid if causation is beyond our control. Sometimes the ceiling does cave in on us regardless of our ability and effort. Careful drivers do get rear-ended.

2. *Stability*. Expectations for the future are based on whether the cause is perceived as stable or subject to change.

<i>Unstable</i>	<i>Stable</i>
Effort	Native ability
Luck	Task difficulty

The only attribution that offers no possibility for change in the eyes of the perceiver is native or genetic ability. "My legs are short and I'm stocky; no matter how hard I try, I'll never be a sprinter." "I have no artistic ability; there's no point in my studying art (music, drama, dance)." "I've always been a dud in math; I'll never understand it." If the person believes that failure is inevitable, there's no point in trying. Because of a person's perception of his or her ability, task difficulty can be seen as a stable cause (i.e., "Math/sprinting/music will always be easy/difficult for me").

On the other hand, a realistic appraisal of one's abilities helps us avoid frustration from expending effort when there is no possibility of success. Clearly, a deep-voiced person should not try to become a soprano. The short, stocky person's effort would be better spent on wrestling than on sprinting. The person with little tolerance for stress had best stay out of teaching.

It is the *invalid* attribution of failure to native ability that is dangerous. We are a math phobic nation, not because

of native ability, but because of mechanically manipulating numbers with little or no meaning ("Yours is not to reason why, just invert and multiply"). That many people do not believe they have ability in the arts is a result of instructional experience, *not* basic ability. Moreover, recent investigations (Lane and Walberg 1987) of poverty cultures reveal that much of the problem lies in lack of language development as a result of the environment, not in the genes.

When students attribute success or failure to stable causes, they expect the same from the future as from the past. When they attribute success or failure to unstable causes, their expectations can change.

3. *Controllability*. A third aspect of causality is related to an individual's feeling of potency to affect the outcome by controlling the cause.

<i>Controllable</i>	<i>Not Controllable</i>
Effort	Ability
	Task difficulty
	Luck

Of all the causal attributions, the only one completely under our control is effort: we can determine how much effort we will expend. People do not exercise control over ability, task difficulty, or luck. Consequently, we put forth effort *if* we believe that the effort will influence the outcome. If I believe studying will influence my grade, I'm more apt to study. If I believe my grade is the result of the teacher's compassion, the kind of test, or just luck, there's no point in studying.

Research on high achievers, whether in mathematics, athletics, the arts, science, or business, reveals that successful people exert enormous effort (Gardner 1983, Bloom 1985). Consequently, if students are to succeed, they must believe that when they expend effort—something they completely control—they will experience success. But note that if students believe success or failure is the result of ability, task difficulty, or luck, then there's no point in putting forth a lot of effort. Also remember, it is their *perceptions* of causality, not reality, that matter in these events.

Attributions of causality often vary between the perceptions of actor and observer, between students and teachers (Jones and Nisbett 1972). Actors tend to ascribe failures to the "not me" cause. The tennis player, missing the ball, glares at his racquet as if there were a hole in it. The observer more frequently attributes the miss to a stable factor: "He always swings too fast." The student as well can attribute failure to "not me" causes: "She gave an impossible assignment." The teacher attributes poor performance to stable characteristics ("They never really work at it") or to situational characteristics ("Those kids were sure rowdy today"). The administrator's attribution may be that "she never has an orderly classroom."

When actors and observers communicate, it is important to take into account the characteristic bias of each in attributing causality.

Implications for Students

Why are some students almost always successful while others seem doomed to fail? Part of the explanation lies in their beliefs about the causes of success and failure. Educators can use attribution theory to help more students succeed.

1. *Locus* of causality determines academic self-esteem. If I believe I have ability and can achieve success with effort, I have a positive self-concept as a student. If I believe that no matter how hard I try, I will not be successful, my impression of my ability and my self-concept suffers. If I believe my A was the result of teacher indulgence or luck, my self-esteem is not enhanced. Pride results from accomplishment only when we attribute that accomplishment to ability or effort. Everyone enjoys an excellent meal, but only the cook can take pride in it.

2. *Stability* of causality prompts a student to believe either that the future is predetermined or that it can be changed by effort. If I succeeded because I "tried hard," then, if I continue to try hard, I'll succeed again. If my achievement was due to natural ability, I don't have to work hard. If my success or failure was due to external

elements, there's no point in trying. It is essential that students believe they have the ability to achieve success if they expend effort and that they anticipate less success if they don't try. Note, however, that if students try hard and fail, one obvious conclusion is that they lack ability. As a result, their self-esteem is diminished, and future effort seems pointless.

3. *Controllability* of causality creates the feeling of being commander of one's fate and is a powerful determinant of emotional health. To be buffeted by one's environment produces a feeling of helplessness. When my success depends on me, it may be scary, but I'm in charge. When I cannot affect what happens to me, I become a pawn of others (deCharms 1968). Consequently, I must either become resigned to my fate or despair.

Students must accept the fact that much of what happens to them is a result of what they do. By changing actions, they frequently can alter outcomes. This association builds a feeling of potency in the individual. "If I think I can, I might; if I think I can't, I'm right." The placebo effect in medicine is testimony to the powerful effect of a person's beliefs of causality and controllability rather than reality. The same effect can be found in education.

In summary, let us examine the significance of students' attributing success and failure to the two most dominant attributions—ability and effort—on each of the continuums. If a student thinks she succeeded on an assignment because of her ability, her self-esteem will most certainly be enhanced, she will expect success in the future, and she may be motivated to attempt similar tasks. If, however, a student thinks his failure was because of a lack of ability, his self-esteem will be lower, he will expect failure, and he may not attempt a similar task in the future.

Different effects result, however, when success and failure are attributed to effort. When students attribute success to effort, they perceive that they can do the assignment and can expect success in the future if they continue to try. They may fail, but the

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outcome presumably is within their influence (internal, unstable, and controllable). Perceiving failure as caused by lack of effort allows students the possibility of future success with additional effort.

This latter attributional pattern, then, optimizes the likelihood of future success and subsequent motivation: success perceived as the result of ability plus effort and failure perceived as the outcome of lack of effort.

Implications for Teachers

Attribution theory, therefore, has meaning for the ways teachers respond to their students' performance.

1. *Locus*. It is essential that teachers diagnose where students' learning leaves off and new learning needs to begin. If the learning to be accomplished is too easy or impossibly difficult, effort is irrelevant. With a teacher's accurate diagnosis and effective teaching, students' efforts should bring success. When students find the locus of causality is within themselves, they realize they can control success.

A teacher's delighted praise or impatient criticism can convey an unin-

tended message about that student's ability (Barker and Graham in press). Praise for success resulting from little effort teaches the learner not to work hard. Criticism for failure on a task that could have been accomplished with effort communicates to a student that he or she has the ability to succeed and should have put forth effort.

2. *Stability*. Students need to believe that their ability to be successful is stable and that they control the effort necessary for success. By emphasizing that "you can do it if you try" (and making sure they can), teachers convey to students that ability plus effort equals success.

3. *Controllability*. The way a teacher responds to a student's success or failure can signal the teacher's belief as to whether the student is in control of success or failure. Imagine your dinner guests' arriving two hours late because they hated to leave their house before a TV show ended. You would feel angry and indignant, no doubt, because they could have prevented their lateness. Suppose your guests were late because they had a flat tire, no phone was available, and the repair truck was forever in arriving. Now how would you feel? Forgiving and sympathetic, for the problem was beyond their control.

Similarly, teachers' behaviors convey unintended messages to students. For example, annoyance can say to a student that he had the ability to perform successfully and was responsible for the less-than-satisfactory performance. Sympathy and understanding can communicate that no matter how much effort a student expended, he could not have accomplished the task. For a teacher to accept less from a student than she is capable of doing can convince the student of your belief that, even with effort, she doesn't have the ability to meet the expectations. Criticism of performance when the student could have done better communicates, "You have the ability."

Developmental differences figure prominently in the way students perceive the causal potential of ability and effort. Young children four to five years of age do not see an inverse

relationship between ability and effort. If asked, "Who are the smart kids in your room?" they will respond, "The ones who try hard or practice a lot" (Nicholls 1978). However, a junior high or high school student who sees a fellow student is putting forth great effort may respond, "If the student has to try that hard, it may mean he is not very smart." Rather than equating ability and effort as young children do, older students distinguish these as discrete constructs: the more able a person is, the less effort may need to be put forth.

Because of these developmental differences, teachers may observe a devaluation of effort as students get older. That is, if high school or college students wish to be considered smart, they may put forth a great deal of effort to convince others they are not putting forth effort. In order to preserve their egos, they try hard to show they're not trying hard. Should they fail, they can convince others they could have succeeded had they tried. If they succeed without apparently trying, they're "smart" (Nicholls 1976). Ability and effort represent an inverse relationship.

Common Sense About Effort

While much of attribution theory is common sense, educators should stay alert to its far-reaching implications for improving student learning. Indeed, the implications carry directly into principal-teacher and superintendent-principal interactions. For example, when a principal says "Your teaching makes that class look easy," the message is very different from the one we hear in "You're lucky to have such an easy class." Expending effort enhances everyone's chances for excellence in performance, and feeling in charge is essential to a healthy self-concept. We must downplay ability as the asset of ultimate worth and emphasize effort as the controllable variable with the highest probability of producing success. Students, teachers, and administrators must not be allowed to plateau with acceptable current performance but should expend effort to make "good better and better best." □

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