

How Do Teachers' Expectations Affect Student Learning

The term "self-fulfilling prophecy" is apt because once an expectation develops, even if it is wrong, people behave as if the belief were true. By behaving this way, they can actually cause their expectations to be fulfilled. Self-fulfilling prophecies occur only if the original expectation was erroneous and a change was brought about in the student's behavior as a consequence of the expectation.

Researchers have studied the ways in which teachers' beliefs about students affect their behavior toward students. Some kinds of differential behavior toward students who vary in their mastery of the curriculum are appropriate and productive. Giving some students more advanced material than others is clearly necessary when there is variability in student skill level, and students need different amounts and kinds of teacher assistance and attention. Nevertheless, most of the teacher behaviors described below, which have been shown to be associated with high versus low expectations, cannot be defended as appropriate accommodations to individual student needs.

Teacher Behavior Toward High- and Low-Expectation Students

Rosenthal (1974) divided teacher behavior associated with high or low expectations into four categories: socioemotional climate, input, output, and affective feedback. Examples of each of the four categories are described below (see also Good, 1987).

Socioemotional Climate

- smiling and nodding
- friendliness

Input

- distance of seat from teacher
- amount of teacher interaction
- amount of information given to learn or problems to complete
- difficulty and variability of assignments

Output

- calling on during class discussions
- providing clues, and repeating or rephrasing questions
- wait time for student response to teacher question
- level of detail and accuracy of feedback

Affective Feedback

- amount of criticism
- amount (and basis) of praise
- pity or anger expressed for low performance

Some of these differential behaviors have direct effects on learning, and consequently widen the gap between relatively low- and high-achieving students. For example, students who are given more opportunities to learn, more clues, and who are called on more frequently should learn more than students who are given fewer such opportunities. Other teacher behaviors, such as those affecting the social-emotional climate or affective feedback, influence learning indirectly by affecting students' own beliefs about their competencies, their expectations for success, and consequently their effort and other achievement behaviors.

Teachers may also develop closer relationships with children who are high-achievers. Students like Safe Sally are often seen as easier to teach; they typically present fewer behavioral problems, and they may be more oriented toward pleasing the teacher. A positive, respectful relationship with the teacher gives students the sense of security they need to be active participants in class, ask questions, and seek challenges-which in turn promote learning. Teachers are less likely to develop a close relationship with Alienated AI, even though such a relationship might make a substantial difference in his attachment to school.

Teachers vary greatly in the degree to which they treat low- and high-expectancy students differently, and also in the nature of their differential treatment. Some teachers pay more attention to high expectancy students, and some teachers engage in "compensatory" behaviors, focusing more on low-expectancy students (see Babad, 1992).

Even behaviors designed to provide extra support for low-expectancy students, however, can undermine learning. First, such compensatory behavior is sometimes accompanied by subtle negative behaviors or expressions. Babad (1992) found that teachers often displayed negative emotions (e.g., hostility, tenseness, anxiety, condescension), while they invested greater time and

attention to relatively low-achieving students. Second, low-performing students can interpret teacher behavior that is meant to protect their feelings or to help them learn as evidence of their low competence, and this in turn lowers their own expectations and effort. Behavior reflecting teachers' best intentions, ironically, can do the most harm.

Well-Meaning But Counter-Productive Teacher Behaviors

Consider, for example, the research on pity and anger. Children as young as six years understand that anger is aroused when another's failure is attributed to controllable factors, such as lack of effort, and by about the age of nine years children understand that pity is aroused when another's failure is perceived to be caused by uncontrollable causes (see also Graham, 1990, 1994; Graham & Weiner, 1993). Graham (1984a) demonstrated in an experiment that expressing pity or sympathy, which is usually meant to protect students' feelings about themselves, can actually have the opposite effect. In her study an experimenter expressed either mild anger or sympathy to children who had experienced failure. Children who had the sympathetic experimenter were more likely to attribute their failure to a lack of ability than children who had an angry experimenter. The latter were more likely to attribute their failure to a lack of effort. Children who received sympathy also had lower expectations for success in the future than children who received an angry response from the experimenter. By simply expressing an emotion, the experimenter influenced children's perceptions of the cause of their failure and their expectations regarding future outcomes. And the sympathetic emotion had the more negative effects.

This process can be illustrated by a teacher's likely responses to Santos and Hannah for turning in a math assignment that is only half completed. Santos' teacher, believing that he is capable of finishing the task, attributes the incomplete paper to his typical half-hearted effort. With an exasperated voice, the teacher threatens Santos with punishment: "If you don't finish your assignment tomorrow, you'll stay after school until it is finished." Santos knows that the teacher is angry because she assumes that he didn't exert much effort and could have finished the assignment if he had tried. The teacher's emotional response, therefore, serves to reinforce Santos' confidence in his ability.

A different reaction might occur in Hannah's case. Her teacher is likely to believe that she is unable to do any better, and might sympathetically tell her not to worry about not being able to complete that task. Hannah interprets the

teacher's sympathy as evidence of the teacher's low perceptions of Hannah's competence, thus reinforcing her own doubts about her ability to do the assigned work.

Findings on the effect of teachers' emotions are particularly relevant to student populations that are often viewed as having low competencies, such as learning-disabled students. In fact, one study found that teachers expressed more pity and less anger for children described as having a learning disability than for children who exerted the same effort and had the same outcome but were not given the LD label (Clark, 1997).

A related counter-intuitive finding concerns the effect of praise. In some circumstances there appear to be negative side effects of praise, at least for older children and adults. Praise for successful performance on an easy task can be interpreted by a student as evidence that the teacher has a low perception of his or her ability. As a consequence, it can actually lower rather than enhance self-confidence. Criticism following poor performance can, under some circumstances, be interpreted as an indication of the teacher's high perception of the student's ability.

Praise and criticism can have these paradoxical effects because of their link with effort attributions, and because people perceive effort and ability to be inversely related. Recall that if two students achieve the same outcome, the one who tried harder is judged by children over the age of about eleven years as lower in ability (Nicholls & Miller, 1984a). Research has shown, accordingly, that children approximately (but not below) the age of 11 rate a child who was praised by the teacher as lower in ability than a child who was not praised, and they rate a child who was criticized as higher in ability than a child the teacher did not criticize (Barker & Graham, 1987; Miller & Hom, 1997).

The potential for negative effects of praise and positive effects of criticism on children's self-confidence was also shown in a naturalistic study by Parsons et al. (1982). They found in the 20 fifth to ninth-grade mathematics classrooms they observed that the amount of criticism of the quality of students' work was positively related to students' self-perceptions of their math ability and future expectations, unless the criticism was in reaction to a student-initiated question. Praise related to work was positively associated with math self-concept for boys but not for girls. The researchers concluded that teachers who believe they should avoid criticism and give praise freely overlook the power of the context and of students' interpretations of the meaning of the

message. They suggest that well-chosen criticism can convey as much positive information as praise.

Helping behavior can also give students a message that they are perceived as low in ability, and it can undermine the positive achievement-related emotions associated with success. Meyer (1982) describes a study by Conty in which the experimenter offered unrequested help either to the subject or to another individual in the room working on the same task. Subjects who were offered help claimed to feel negative emotions (incompetence, anger, worry, disappointment, distress, anxiety) more, and positive emotions (confidence, joy, pride, superiority, satisfaction) less than subjects who observed another person being helped. Graham and Barker (1990) report that children as young as six years rated a student they observed being offered help as lower in ability than another student who was not offered help.

Again, an attributional analysis explains the effect of help on ability judgments and emotional reactions. Research has shown that in a variety of contexts people are more likely to help others when their need is perceived to be caused by uncontrollable factors, such as low ability, than when their need is attributed to controllable factors such as insufficient effort (see Weiner, 1986, 1992; see Bennet & Flores, 1998, for an attributional analysis of peer helping). This was shown in a classroom study by Brophy and Rohrkemper (1981), in which teachers expressed a greater commitment to helping "problem" students when the causes of need were presumed to be uncontrollable, such as low ability or shyness, than when the problems were attributed to controllable factors, such as lack of effort.

There are many other ways teachers can unintentionally communicate low expectations. Good and Brophy (1978) describe the behavior of a physics professor who believed that females have difficulty with physics. To avoid embarrassing them, he never called on them to answer a mathematical question or to explain difficult concepts. He also showed his concern by looking at one of the girls after he introduced a new point and asking, "Do you understand?" (p. 75). Such "helpful" behavior undoubtedly gave the females in the class a clear negative message about the teacher's perception of their competencies. I observed another example of a teacher unintentionally conveying low expectations in a fifth-grade classroom. The teacher exclaimed happily to a student who completed a math problem at the board, "Scott, I didn't think you'd get that!" I believe she meant the comment as praise, but the message that she expected him to fail was clear.