

# Perspectives on the Dental School Learning Environment: Theory X, Theory Y, and Situational Leadership Applied to Dental Education

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*Abstract:* This article applies two well-known management and leadership models—Theory X and Theory Y, and Situational Leadership—to dental education. Theory X and Theory Y explain how assumptions may shape the behaviors of dental educators and lead to the development of “cop” and “coach” teaching styles. The Situational Leadership Model helps the educator to identify the teaching behaviors that are appropriate in a given situation to assist students as they move from beginner to advanced status. Together, these models provide a conceptual reference to assist in the understanding of the behaviors of both students and faculty and remind us to apply discretion in the education of our students. The implications of these models for assessing and enhancing the educational environment in dental school are discussed.

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Dental educators are not unlike other individuals who supervise the activities of a group of subordinates. They bring to the table a set of basic beliefs about how people view their work. As with all supervisors, their own behavior is influenced by the assumptions that they make about the attitude and behaviors of the people they supervise.

In *The Human Side of Enterprise*,<sup>1</sup> originally published in 1960, McGregor and Cutcher-Gershenfeld outlined two general theories about people at work that they called Theory X and Theory Y. Supervisors can be divided into the two groups based on the extent to which they agree with a set of assumptions about human behavior at work. Theory X assumptions are:

- People are inherently lazy and will avoid work if they can.
- Most people have little desire for responsibility and prefer to be directed.
- People must be coerced, controlled, or threatened with punishment to get them to perform. (p. 45)

Theory Y assumptions are:

- Work is as natural as play and rest.

- People are ambitious, self-motivated, and will readily accept greater responsibility.
- People will use their creativity, ingenuity, and imagination to solve problems. (p. 60)

In reality, it is unlikely that an individual will agree with all the assumptions of either Theory X or Theory Y. A person will fall somewhere on a scale between one extreme and the other. That position on the continuum is what feels right. It is the most natural reflection of his or her attitudes and, like a suit of clothes that fits perfectly, it is unique to each individual.

Theory X assumptions made by dental educators may include:

- Dental students are unlikely to expend more than the minimum effort required to pass a course.
- Dental students need to be closely supervised and directed, or they will fail to achieve a satisfactory level of performance.
- Students want to be told what to do, and they do not seek the responsibility of researching the best treatment method or technique.
- It is the responsibility of the educator to function as a gatekeeper and to “weed out” the students who fail to achieve satisfactory levels of performance.

Theory Y assumptions made by dental educators may include:

- Dental students are self-motivated, successful individuals who have a basic desire for knowledge and experience.
- Dental students have the capacity to be self-directed learners who can seek out knowledge on their own.
- Every student has the potential to achieve a satisfactory level of performance if provided an atmosphere conducive to learning.
- The educator's job is to remove the roadblocks in the way of the accomplishment of educational objectives.

It is our experience that Theory X and Theory Y educators share a common vision for the outcomes of dental education. Both groups agree that dental school graduates must possess the competence and confidence to serve the dental needs of the community. They should adhere to the highest ethical standards and exercise professional judgment and discretion as they advance to the highest levels of skill.

The difference between these two groups is in the path taken to the objectives. Theory X individuals function as the "cop." They enforce the rules of behavior and punish those who violate the standards. They may believe that they are upholding the highest professional principles and protecting dental patients from substandard operators. Theory Y faculty, on the other hand, function as the "coach." They focus on developing students through nurturing, encouragement, support, and positive reinforcement. They try to facilitate the accomplishment of educational goals.

It has been our observation that the difference between Theory X and Theory Y educators is a potential source of conflict. The likelihood of conflict increases when individuals who work together are strongly oriented to either Theory X or Theory Y. Theory X individuals may consider Theory Y individuals to be too "soft" and unconcerned about protecting the patient. Conversely, Theory Y individuals see the Theory X individuals as too "hard" in their relations with students and observe that they add additional stress to the already stressful process of dental education.

Sharing this observation with other faculty members has led us to conclude that not only do individuals recognize their own position along this continuum; they also make assumptions about where professional colleagues fall on the continuum. Thus, faculty members may divide according to basic philosophical differences in their approach to teaching.

Negotiating a successful outcome between individuals who fundamentally disagree is the subject of *Getting to Yes* by Roger Fisher and William Ury, published in 1991.<sup>2</sup> The book, which grew out of the Harvard Negotiation Project, suggests strategies for resolving conflict. The authors imply that many conflicts result in a contest of will, where one party wins and the other loses. They believe that win-lose situations are harmful to organizations, that they may destroy relationships, and that they adversely affect the ability of people to work together. To avoid a win-lose situation, they recommend using a strategy that they call "principled negotiation" (p. 10). The technique uses objective, measurable standards to test the essential fairness of an outcome. The most certain resolution of the conflict comes from a "win-win" situation.

The position of one group may be "I am protecting the patient." The position of the other group may be "I am protecting the student." Fisher and Ury suggest that arguing from firm positions is unlikely to produce a favorable outcome. As negotiations proceed, the groups dig in until further progress is doubtful. Rather than arguing across a table and engaging in a contest of will, they urge individuals to sit down side-by-side like two judges who share the responsibility to arrive at a fair outcome based on agreed upon standards. Those standards may include precedent, tradition, professional standards, equal treatment, and others (p. 85).

Occasionally, issues of serious academic deficiency must be arbitrated by a third party that has the power to determine whether a student will remain in school. An academic performance committee (or a similar group within the dental school) has the authority and responsibility to resolve conflict that cannot be resolved at a lower level. Occasionally, an issue must be referred to the dean for final disposition. Hard feelings must be set aside after a final decision is reached.

The conflict between Theory X and Theory Y individuals diminishes in significance with the understanding that both groups play important roles in dental education. Both the cop and the coach are needed to prepare students to succeed in their professional lives.

Dentistry is an inherently stressful occupation. Routine stressors include uncooperative patients, schedule demands, collections, regulatory guidance, and others. Dentists who strive for clinical excellence may feel stress when they fall short of their own expectations. Dental education must clearly prepare

students to learn to manage stress in order for them to succeed in the profession.

The term “stress” is most commonly used to describe a negative reaction to events or circumstances. Stress, however, can be beneficial if it improves performance or contributes to a sense of fulfillment or achievement. Canadian physician Hans Selye coined the term “eustress”<sup>3</sup> to describe this type of stress. There is a point, however, where eustress becomes distress and performance decreases. The relationship is represented by Figure 1. The curved line represents the relationship between stress and performance. The highest point in the line represents the point where additional stress will decrease performance.

The curve is unique to each individual. Some students will experience distress when dealing with events that do not seem sufficient to have provoked

a strong response. Others may seem relatively unaffected by highly challenging circumstances. The student’s reaction to a stressful event may change over time depending on a variety of circumstances that may exist entirely outside of dental school.

The important point for dental educators is that stress can and should be used to raise students’ level of performance. Mock board examinations are stressful, but they improve the student’s ability to perform on the real licensure examination. When students accomplish increasingly difficult procedures under realistic circumstances, their comfort zone expands and the curve in Figure 1 is moved to the right. Theory X faculty will help to push the stress envelope to create confident practitioners. Theory Y faculty are needed to help students manage the stress. Both are essential functions to prepare students for what comes next.

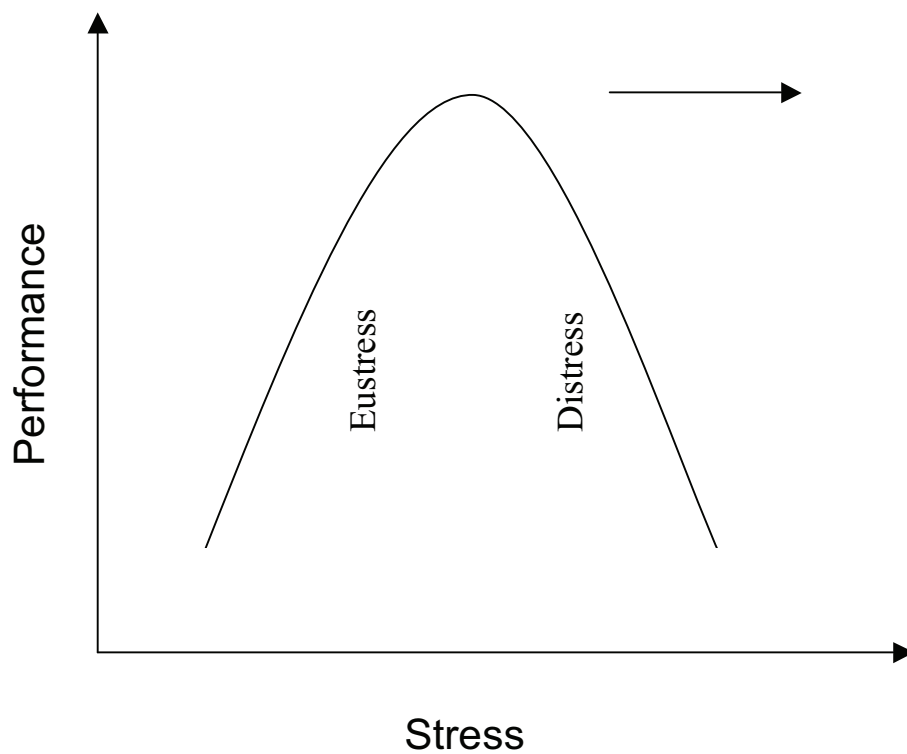


Figure 1. Relationship between stress and performance

An organization comprised of only cops or only coaches is unlikely to be successful. It has been our observation that activities that have no stress receive little attention from students, so someone may have to be the cop. Failure to enforce standards of performance and accountability may allow problems to be passed on with the student from one level to the next.

The need for a mix of cop and coach behaviors within an organization has been discussed. The Situational Leadership Model described by Ken Blanchard and Patricia Zigarmi in *Leadership and the One Minute Manager*<sup>4</sup> suggests that an *individual* should use a mix of directive (cop) and supportive (coaching) behaviors depending on situational variables. The perfect suit of clothes may not be appropriate in all situations.

Situational Leadership grew out of a body of work on leadership in government and industry where it was observed that the managers were most effective when their style met the needs of the group they were supervising. Leadership has been defined as “the behavior of an individual when he or she is directing the activities of a group or an individual towards a shared goal.”<sup>5</sup> Dental educators should understand that leadership is not a quality of character possessed by only a few individuals, but a process of influencing others in which many people participate. The Situational Leadership Model provides insight that will help the educator to identify and select the appropriate mix of directive and supportive behaviors in a given situation. The model acknowledges that the leader will have a preferred style, but that he or she must analyze situational variables before choosing behaviors that will be appropriate to an individual or group of subordinates depending on the task at hand.

An effective teacher must have more than one tool in the toolbox. Behavioral flexibility (the ability to display more than one style) comes first. Second is deciding which behaviors are appropriate in a specific situation. Assessing the technical ability, cognitive skill, confidence, motivation, and maturity of an individual or a group of students will help the educator to determine their developmental level. The level of development will then suggest an appropriate style to approach a given task.

The Situational Leadership Model identifies four levels of development that are plotted on a grid. On the X axis of the grid is directive behavior; on the Y axis is supportive behavior. Each level requires a different mix of directive and supportive behaviors

that together constitute an appropriate leadership style.

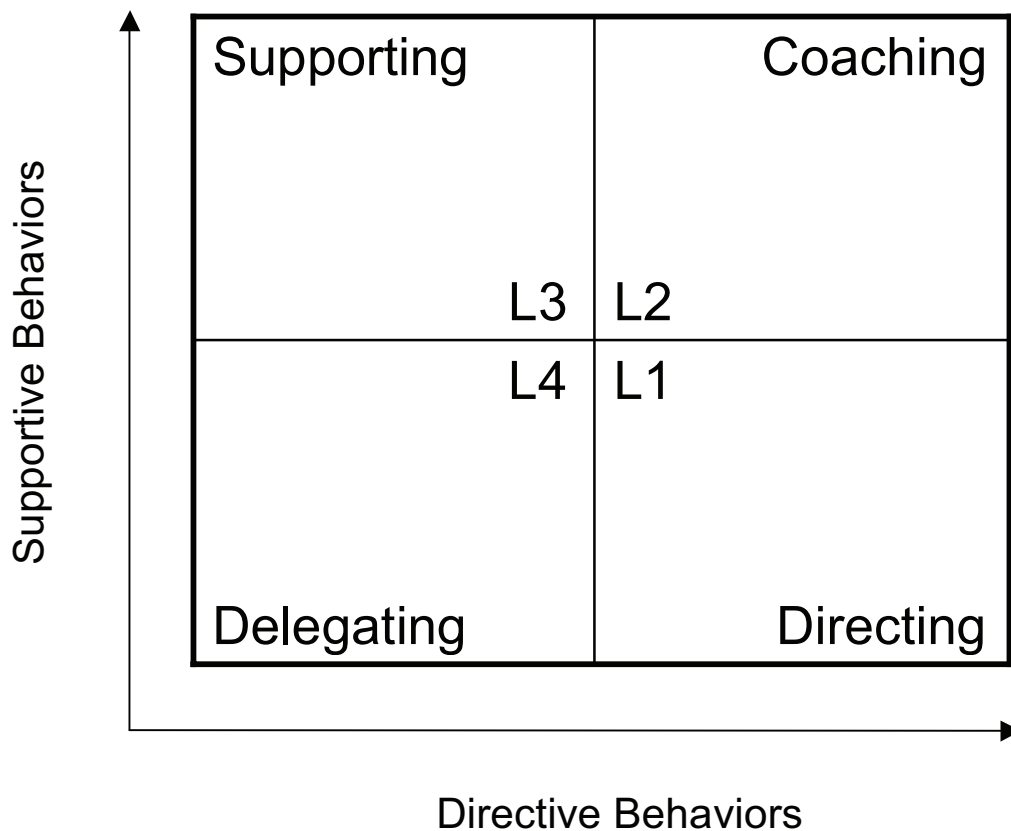
The grid is divided into four quadrants shown in Figure 2. The quadrants are as follows:

- **L1: Low Competence, High Commitment.** Students generally lack the specific skills required for the job in hand. However, they are eager to learn and willing to take direction. The directing style is appropriate at this level.
- **L2: Some Competence, Low Commitment.** Students may have some relevant skills, but won't be able to do the job without help. The task or the situation may be new to them. The coaching style is the best choice for L2.
- **L3: High Competence, Variable Commitment.** Students are experienced and capable, but may lack the confidence to go it alone or the motivation to do it well or quickly. The supporting role is most effective at L3.
- **L4: High Competence, High Commitment.** Students are experienced at the job and comfortable with their own ability to do it well. The delegating style is appropriate at this level.

The levels of development generally mirror the stages as students advance from beginners to advanced operators. It should be noted that the level of development does not always match the year in dental school. For instance, students may remain at L1 through the second year of dental school. For this group of students, the directing style is most appropriate. As students learn new or foundational skills, they should receive frequent feedback and constructive criticism. They should receive honest evaluations and be told when they need more practice to master a skill.

Critical evaluations may be difficult for dental students to deal with. Students who have earned admission to dental school are high academic performers. But, in addition to cognitive skills, dentistry requires the ability to visualize the final outcome of a procedure in three dimensions and the manual dexterity to create what has been visualized. These are skills that are not developed or tested in undergraduate schools. As they acquire these skills, incoming students may find themselves struggling with critical feedback. At the same time, critical feedback is important to lay the foundation for success in the clinic. A student must understand the level of precision needed to be able to perform dental operations that meet quality expectations.

As the student advances to the clinic (L2), he or she will still require close supervision but will also



**Figure 2. Four levels of development in the Situational Leadership Model**

Adapted from Blanchard K, Zigarmi P. Leadership and the one minute manager. New York: Morrow and Company, 1985.

require more support. This combination of direction and support is referred to as coaching style. Athletic coaches know the value of modeling of successful behaviors, repetition, and positive reinforcement. The faculty member serves as a model for professional behavior while providing close technical supervision as students accomplish their first dental procedures.

The educator may become frustrated at this stage because the preclinical training may not seem to have survived the transition to the clinic. Instructors may assume that if a topic was covered in lecture, the students should understand and be able to apply the knowledge in a clinical situation. This may be true for only a small number of students. Most will require repetition and reinforcement. The goal at this stage is for the student to successfully integrate lessons from the basic sciences and preclinical instruction and begin to build a database of clinical experience.

The next developmental level (L3) is reached when the student has the relevant information to perform a task but lacks confidence in his or her skill or decision making to perform the task quickly and consistently. Students often proceed slowly with clinical procedures because they are afraid of making errors that may have adverse consequences for the patient. At this developmental level, students may need support and encouragement more than technical supervision. A student may spend a long time at this level, and unfortunately, a few will fail to advance beyond it. They will depend on the intervention of faculty to accomplish many procedures when they should be advancing toward independence. Students with this problem are a particular challenge to educators because lingering doubts may remain as to the student's ability to function as an independent health care provider. The cause may be a lack of cognition,

manual skills, or professional judgment. By this time, students have made a long-term financial and emotional commitment to becoming a dentist, so the decision to dismiss a student for a deficiency is one of the most difficult decisions faced by a school.

By the time students are ready to graduate, most will have reached L4. These students are ready to function as independent operators. At the highest level, students will be able to solve problems, critically evaluate their own work, select the best dental material and technique to use, and use professional judgment. Close supervision should no longer be required, and students should be given the responsibility to find their own answers to clinical problems. The delegating style is most appropriate to this group of students.

The leadership style will, of course, be modified depending on the task at hand. A student or group of students at L4 may need direction and close supervision when they are introduced to new techniques or materials. This is particularly true in health care where errors have adverse health consequences. As dental educators we underwrite the quality of the treatment performed under our supervision. We cannot knowingly allow students to learn from their own mistakes in the clinic.

It is likely that, at some time, all dental educators will struggle to motivate, develop, and inspire dental students to achieve the highest level of per-

formance. Theory X and Theory Y and Situational Leadership are two time-tested models that help the educator to understand the complex interaction between professor and student. Theory X and Theory Y explain how assumptions made by the educator may shape his or her behavior. The Situational Leadership Model suggests that acting on those assumptions may lead to inappropriate or ineffective styles. Together, these models provide a conceptual reference to assist in the understanding of behaviors and to apply discretion in the education of our students. The implied goal is that we can use this knowledge to become better dental educators as we seek to improve student performance.

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