# WHY TEACHERS FAIL? by B.F. Skinner

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http://www.youtube.com/watch?v=T-NlINHHKPI

Presentation by Julie Moritz

#### B.F. Skinner

(1920-1990)

- B.F. Skinner was one of the leading behavioral psychologists of the 20th century.
- He attended Hamilton College with the intention of becoming a writer, however, he soon abandoned this dream when he entered Harvard University as a graduate student to study psychology.
- Skinner is considered the leader of behaviorism, "...a psychological theory that asserts that behaviors represent the essence of a person and that all behaviors can be explained as responses to stimuli" (Johnson et.al., 2005, p. 324).
- His ideas on teaching and learning had a profound effect on American teachers for several decades of the past century.

# INTRODUCTION

- Skinner believed that students needed to learn more, become better prepared for college and be held to higher standards, however, he did not feel that these reasons validated aversive pressures.
- Skinner wrote (1968), "A standard is a level of achievement; only under a particular philosophy of education is it a criterion upon which some form of punishment is contingent" (p. 254).
- Skinner felt that punishment was the most commonly used technique to control behavior in our society and that the only thing people learned was how to later avoid punishment.

# **AVERSIVE CONTROL**

- Aversive control may be explained as an unpleasant stimulant to change undesirable behavior.
- Teachers may use aversive contingencies to provide students with an opportunity to adjust their behaviors that would result in an unpleasant or painful situation.
- Skinner felt that aversive control was partly practiced in the classroom because it coincided with philosophies of government and religion and that cultures had taught teachers to behave accordingly.
- Additionally, he wrote that aversive control could be defended as "nature's way" since our environment may similarly teach a person to act in certain ways to reduce the threat of not knowing.

### **AVERSIVE CONTROL**

(continued)

- •Skinner believed that most teachers were indeed humane and did not want to threaten their students yet they often found themselves doing so.
- •Since there were no effective alternatives to teachers' aversive behavior, he felt it continued.
- Therefore, something else was needed, it was not enough to simply abandon aversive measures.

## TELLING AND SHOWING

- Skinner believed that even though children appeared to have a "natural curiosity" and an "inherent wish to learn", a student could not simply learn by being told or shown something.
- Rousseau was the great advocate of natural learning. He believed that there should be no arranged consequences.
- Skinner writes of Pestalozzi trying to teach his son through natural learning methods. Pestalozzi concludes that natural learning is unsuccessful.
- Skinner argued that students do not learn when they are simply told or shown because something essential was missing: "positive reinforcement".

#### GETTING ATTENTION

- The failure of telling and showing is often credited to students' lack of attention. Consequently, teachers may feel that the only way to make their students pay attention is by punishing them for not listening or looking.
- Alternative solutions may be proposed, such as: freeing the classroom from any distractions, making the material to been seen or heard more attractive or trying to make the school itself more attractive and pleasant.
- However, none of these solutions are ideal since they do not actually teach the students what they are in school to learn. They merely provide the setting for the instruction that is to take place.

#### TEACHER AS MIDWIFE

- Many educational theorists have concluded that teachers must HELP the students to learn rather than teach the students.
- According to this approach, a student already knows the truth, the teacher must simply show him that he knows it by asking the student a series of questions that lead the student to a certain conclusion (Socratic Method).
- Yet, even Socrates could not argue that the student's soul knew the facts of history, mathematical proofs or a second language.
- For this reason, perhaps the teacher's role as a midwife must be applied to information the students have already learned. The teacher may then show the student that he indeed remembers what he has already been told or shown.
- Cardinal Newman provides an example of the Socratic Method applied to a student's prior knowledge in *The Idea of a University*.

#### TEACHER AS MIDWIFE (continued)

- As Skinner writes however (1968), "But discovery is no solution to the problems of education...It is quite impossible for the student to discover for himself any substantial part of the wisdom of his culture, and no philosophy of education really proposes that he should" (259).
- Skinner further elaborates that it is dangerous to suggest that it is beneath students to learn what others already know by memorizing facts, formulas, etc. Similarly, it would be just as dangerous for teachers to give up teaching these important facts in order to provide students with an opportunity to discover them for themselves.
- There are other difficulties as well. For example, what is the role of the teacher who encourages discovery, is he to pretend that he does not know? How is the teacher to prevent a few good students from making all of the discoveries while leaving other students to just witness them?
- Skinner concluded that students should be encouraged to discover but NOT to be taught by the method of discovery.

## THE IDOLS OF SCHOOL

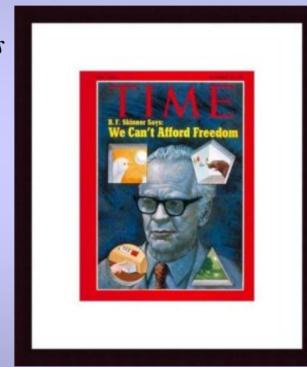
- Through his famous idols, Francis Bacon determines a few reasons to explain why individuals arrive at false conclusions.
- Skinner suggests that he may have added two special Idols of the School: 1. The Idol of the Good Teacher is the belief that what a good teacher can do, any teacher can do 2. The Idol of the Good Student is the belief that what a good student can learn, any student can learn.
- Skinner (1968) suggests that an even greater source of error for educators is, "the belief that personal experience in the classroom is the primary source of pedagogical wisdom" (261).
- He thought that teachers could not profit from their experiences with their students in the classroom because they almost never learned about their long-term successes or failures.

# "CONTINGENCIES OF REINFORCEMENT"

- Skinner thus concludes that teaching is defined as an arrangement of "contingencies of reinforcement" under which behavioral changes may occur without the use of aversive measures.
- Skinner believed that certain experiences resulting with positive reinforcements or rewards would strengthen desired behavioral responses and increase the likelihood that the response would be repeated.
- Then, behavior that is not positively reinforced (or rewarded) will eventually cease to occur.
- Furthermore, through these relevant contingences, teachers may finally analyze student behavior under carefully controlled conditions.

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