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THE SELF-FULFILLING PROPHECY IN EDUCATION

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CHAPTER I

INTRODUCTION

Problem and Purpose

Much research has been directed toward establishing or refuting the fact that teachers have differential expectations for students and that these expectations can influence student performance. The purpose of this paper was to examine and bring together data and conclusions from the research studies and literature relating to this expectancy effect as it occurs in education. This problem was judged valid and worthy of consideration because some popular accounts of the results of research investigations have been misleading and the cause of much confusion. Teacher expectancies have been found by some experimenters to have a profound effect on the academic achievement of students, while others have found little significant evidence of this. Other accounts have seemed to imply that the mere existence of an expectation on the part of the teacher would automatically guarantee its fulfillment.

The major concern of this paper was examining how the expectancy phenomenon, also called the self-fulfilling prophecy, could operate in classroom situations. The attempt was made to consider the following questions in depth: 1) What is the expectancy effect and how far reaching is it in education? 2) How do teachers develop certain types
of expectations for their students? 3) In what ways do teachers convey their expectations to students? 4) How does student perception of teacher expectations affect school performance? The implications of the self-fulfilling prophecy for education to be drawn from this study of expectancy effects were also considered.

The Self-Fulfilling Prophecy

The self-fulfilling prophecy was defined as one person's belief or conception about another that somehow comes to be realized. It has been said to explain how a "... person's expectation for another person's behavior can quite unwittingly become a more accurate prediction simply for its having been made."¹ It was in these terms that the cause and effect relationship between a teacher's expectation of a child's ability and the student's eventual achievement in school was studied.

It must be understood that to prove a prophecy is correct does not necessarily mean that it led to its own accuracy. The self-fulfilling prophecy is said to be based on two assumptions:

1) ... that the act of making a definition about a situation is also an act of making a prophecy about it.

2) ... that the act of making a prophecy about a situation is also an act of creating the conditions through which the prophecy is realized.²


"The prophecy that the sun will rise is not the effective agent in bringing on the dawn."\(^3\) When a prediction is based on previous occurrences, the prophecy is "contaminated by reality."\(^4\) There is a very important distinction to be made between a teacher's prophecy coming true because it is based on knowledge of past performance and its coming true because it is self-fulfilling.

\(^3\)Rosenthal and Jacobson, *Pygmalion in the Classroom*, p. 25.

\(^4\)Ibid.
CHAPTER II

REVIEW OF LITERATURE

Current Research Findings

In reviewing the literature on the subject of expectancy effects, an attempt was made to compare the results of investigations to the findings obtained by Rosenthal and Jacobson. They concluded that changing the teacher's expectations regarding the intellectual abilities of certain randomly selected children actually led to changes in intellectual performance.\(^5\)

In Rosenthal and Jacobson's controversial study of the self-fulfilling prophecy, twenty percent of the children in a particular grade school were selected at random to be singled out as potential bloomers. The teachers were told that on the basis of a previous test, these were the children who would show academic advancement in the near future. The students were tested eight months later and Rosenthal and Jacobson interpreted their data as showing that these children identified as bloomers had made significantly greater gains on a group intelligence test than did the other children.\(^6\) It was contended by the researchers that their data from this experiment was

\(^5\)Ibid., p. viii.

\(^6\)Ibid., p. vi.
consistent with and supported the theory that teacher expectations function as self-fulfilling prophecies.

The work of Rosenthal and Jacobson suggested but did not prove that teacher expectations have a major effect on the intellectual performance of students. Since their experiment, many studies by other investigators have been carried out to test the same hypothesis. Not all results were found to be consistent with the Rosenthal-Jacobson data; some substantiating their results only in part, and some not at all.

Heichenbaum, Bowers, and Ross7 conducted an investigation of expectancy effects with four teachers of female adolescent juvenile offenders. As experimental time was short, changes in intelligence test scores were not expected. The criterion measures were objective and subjective scores given by the teachers. The four teachers had taught the girls for several months and had formed their own opinions of the students' abilities. These previous expectancies were included as a factor in the study when the teachers were asked to rate the girls' academic potential. Six late bloomers were then identified by the investigators, supposedly on the basis of a test to determine academic potential. Three of these six girls were actually chosen because all teachers had identified them as having high potential. The other three girls had all been rated by the teachers as having generally low

potential. This differed from Rosenthal and Jacobson's study, as the teachers in this experiment were given expectancies which confirmed their previous views and also ones that were not totally consistent with the low expectancies they already had for some students. It was one of the stated purposes of the investigation to study the influence of the teachers' prior expectations on the effects of the induced expectancy.

The findings of Meichenbaum, Bowers, and Ross confirmed Rosenthal and Jacobson's findings, as the effect was observed on objectively scored exams but not on those subjectively scored. These results were consistent with Rosenthal and Jacobson's where expectancy effects were significant on intelligence measures but not on teacher grades.

Kester and Letchworth did not find evidence to support the hypothesis that teacher expectations based on knowledge of a student's intelligence test scores affect the student's performance or attitudes toward school. As Kester and Letchworth were working with secondary level students, their findings did not totally discredit Rosenthal and Jacobson's data. There is the possibility that the expectancy effect works to a great degree only in younger children who are not as well developed in their concepts of self. The younger child is more

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8 Ibid., p. 315.
9 Rosenthal and Jacobson, Pygmalion in the Classroom, p. 178.
susceptible to teacher expectations because the teacher is seen as a significant person and as a more valuable source of rewards to him than he would to an older student.\textsuperscript{11} This idea was supported by Rosenthal and Jacobson's findings which showed a great gain in intelligence test scores among the first and second-grade students in their study. Although Kester and Letchworth did not replicate the Rosenthal-Jacobson findings, they did note that teachers spent more time communicating with the pupils they thought were brighter, and thus teacher expectations did influence teacher-student interaction.\textsuperscript{12}

The work of Rosenthal and Jacobson attempted only to show the existence of expectancy effects and originally only mild speculation was made concerning the process through which teacher expectations were actually conveyed to the students. In studying their data, they did notice that there was no difference in the amount of time teachers spent with the students. It was concluded by Rosenthal and Jacobson then that "it may have been more a matter of the type of interaction which took place between the teachers and their pupils which serves as the determinant of the expected intellectual gains."\textsuperscript{13} In regard to this quality of interaction hypothesis, the results of Kester and Letchworth's investigation were not totally inconsistent, even though they did find a difference in the amount of time the teacher spent with high and low expectation students.

\textsuperscript{11}Ibid.
\textsuperscript{12}Ibid., p. 55.
\textsuperscript{13}Rosenthal and Jacobson, \textit{Pygmalion in the Classroom}, p. 159.
Brophy and Good\textsuperscript{14} investigated this intervening process of teacher-student interaction on expectancy effects through an observational study of dyadic contacts between teachers and students in a classroom. They carried out this interaction analysis in four first-grade classrooms, in which the teachers were asked to rank their pupils in order of achievement. In each class, three boys and three girls high on the teacher's list and three boys and three girls low on the list were chosen for the interaction study. It was found that teachers demanded better performance from those students for whom they had high expectations. Teachers were also more likely to accept poor performance from pupils for whom they held low expectations.\textsuperscript{15}

A difference in the quality of teacher-student interaction was definitely noted. Good and Brophy reported that the students were especially treated differently when they gave no response or the wrong response to a question. With the high expectation pupils, the teacher tried to repeat or rephrase the question, give clues, or ask another closely related question that would lead to the right answer. There was an attempt made to work with the individual student and provide him ample opportunity to respond. With the low expectation students, the answers to questions were given or another student called


\textsuperscript{15} Ibid.
on if there was any hesitation. Very little student-teacher interaction was permitted. 16

Brophy and Good concluded that teachers do communicate their performance expectations to different students through their behavior and that "... the nature of this differential treatment is such as to encourage the children to begin to respond in ways which would confirm teacher expectancies." 17 The work of Rubovits and Maehr 18 in studying pre-service teachers in microteaching situations also lent further support to the hypothesis that teacher expectations influence the quality of teacher-student interaction.

Jose and Cody 19 investigating the influence of teacher expectation on first and second-grade students' general intellectual and academic achievement, found no significant differences between experimental and control groups. Differences in intelligence test scores, achievement, and behavior were not found to be significant, nor were observable changes in teacher behavior or teacher-student interaction. Jose and Cody suggested that the expectancy modification used may


not have been strong enough to counter the many natural factors occurring in the classroom that can influence the teacher.\textsuperscript{20} Elashoff and Snow\textsuperscript{21} interpreted Jose and Cody's results as indicating that the failure of other studies to replicate the original Rosenthal-Jacobson findings may have been due to the failure or relative weakness of the expectancy induction.

To test how expectancies are conveyed to the student, and to study teacher behavior and teacher-student interaction, it may be more valid to use naturalistically formed teacher expectancies. Teacher-pupil interaction can then be observed for those students the teacher ranks either high or low. In this way the results will not be dependent on how strongly the expectations were induced.

Davidson and Lang\textsuperscript{22} concluded that elementary school is more meaningful for girls than for boys, as more girls than boys feel that their teachers think favorably of them. These findings have considerable consequences for education. Teachers have long reported more problems with boys in their classrooms than with girls. It is not necessarily based upon a teacher bias against boys, but can be attributed to the more disruptive behavior of boys in general. Their behavior is not consistent with the behavior the teacher expects in the classroom.\textsuperscript{23}


\textsuperscript{22}Helen M. Davidson and Gerhard Lang, "Children's Perceptions of Their Teachers' Feelings Toward Them Related To Self-Perception, School Achievement and Behavior," \textit{Journal of Experimental Education} 29 (December 1960): 112.

\textsuperscript{23}Brophy and Good, "Teachers' Communication of Differential Expectations for Children's Classroom Performance: Some Behavioral Data," p. 373.
It is not only these behavior expectancies but also the expectations that a teacher has about boys' intellectual capabilities that are important. All expectations influence the teacher, whose resulting actions help to determine his students' behavior and performance.

Palardy\textsuperscript{24} conducted a study of the effects of teacher beliefs on the achievement of first-grade boys in reading. He found that when teachers reported that they believed boys to be less successful in beginning reading than girls, the boys in their classes actually were far less successful. But if the teachers stated that they believed boys could do just as well as girls, the boys in their classrooms were equally as successful in learning to read. It seems that teachers "... assess children, reject discrepant information, and operate on the basis of previously developed attitudes..."\textsuperscript{25}

Palardy's overall results and conclusions were consistent with Rosenthal and Jacobson's findings of the self-fulfilling prophecy in the classroom.

Baker and Crist made the following generalizations about teacher expectations:

1) Teacher expectancy probably does not affect pupil I.Q.
2) Teacher expectancy may affect pupil achievement.
3) Teacher expectancy probably affects observable teacher and pupil behavior, ... The teacher behavior most likely to be affected involves eliciting and reinforcing of children's


responses, the kind of attention given to pupils, the amount of teaching actually attempted, subjective scoring or grading of pupil work, and judgments or ratings of pupil ability and probable success... The pupil behavior most likely to be affected involves the kind of response given to the teacher, the child's initiation of activity, his class-appropriate behavior, and his feelings about school, self, and teacher.26

The Rosenthal-Jacobson Study

The methods of the Rosenthal-Jacobson investigation or the "Oak School Experiment" and the accuracy of the conclusions drawn from the results have been repeatedly questioned. The most complete analysis of Rosenthal and Jacobson's study was done by Janet Elashoff and Richard Snow. They reanalyzed the original data from the experiment and concluded that the study did not adequately "... demonstrate the existence of an expectancy effect or indicate what its size may be."27 Elashoff and Snow commented in the introduction of their book, Pygmalion Reconsidered, that "... no one has yet been able to change I.Q. substantially in a controlled and consistent way."28 They summarized their criticisms of Rosenthal and Jacobson's work as a research report by stating:

The RJ [Rosenthal-Jacobson] report is misleading. The text and tables are inconsistent, conclusions are overdramatized, and variables are given prejudicial labels... Frequency distributions are lacking for either raw or I.Q. scores. Comparisons between text and appendix tables are hampered by the use...
of different subgroupings of the data and the absence of intermediate analysis of variance tables. . . . There are technical inaccuracies: charts and graphs are frequently drawn in a misleading way and the p-value or significance level is incorrectly defined and used. Statistical discussions are frequently oversimplified or completely incorrect.

In reply Rosenthal stated that "they [Elashoff and Snow] could not disprove the fact that the experimental children did gain more IQ points than control children, . . ." He felt that they even transformed his original intelligence measurements into different forms, many of which "... were biased statistically to minimize any effects of teachers' expectations." 29

Thorndike 31 also took issue with the inadequacies of Rosenthal and Jacobson's research procedures and the inappropriateness of the conclusions drawn from the data. He stated that their study "... is so defective technically that one can only regret that it ever got beyond the eyes of the original investigators!" He cited data to show that the testing was "utterly worthless and meaningful." Though their book, Pygmalion in the Classroom, he felt may be an "effective addition to educational propagandizing," he stated it did "nothing to raise the standards of educational research." 32

The area of teacher expectations may prove to be a valuable positive force in education, but Snow concluded that the work of

29 Ibid., p. 10.


32 Ibid.
Rosenthal and Jacobson would make an important contribution to education only if it prompted others to do valid research in related areas. The study, he felt, did not come close to providing an adequate demonstration of the self-fulfilling process in the classroom. He stated:

"Pygmalion, inadequately and prematurely reported in book and magazine form, has performed a disservice to teachers and schools, to users and developers of mental tests, and perhaps worst of all, to parents and children whose newly gained expectations may not prove quite so self-fulfilling."

Many other attempts at replicating Rosenthal and Jacobson's results have either failed, or found the expectancy effect in the classroom much less profound. The "Oak School Experiment" has also often been criticized because the experimental subjects in the study were the teachers and not the students, as the teachers received the experimental treatment. With this in mind, is it possible then "... that Pygmalion in the classroom was the experimenter and the teachers under scrutiny were his Galateas?" Rosenthal has long admitted that experimenters tend to obtain the data that they expect to get.

In summary, there have been questions raised about the validity of the intelligence quotient measurement, the statistical analysis of

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33 Rosenthal and Jacobson took the name for this phenomenon of expectancy effects from the Greek myth made so well known by George Bernard Shaw's play, Pygmalion. According to Greek mythology, the goddess of beauty and love in response to a sculptor's prayers gave life to an ivory statue of a maiden.


their data, and the difficulty in replicating Rosenthal and Jacobson's findings. The over-all pervasiveness of the expectancy phenomenon in education has also been questioned. Although the self-fulfilling prophecy may not be as dramatic as Rosenthal and Jacobson describe it, their experiment did point out the need for further study in this area in education. The question of how the expectancy effect occurs in the classroom with natural, non-induced teacher expectancies, is in need of investigation.
CHAPTER III

TEACHER-STUDENT INTERACTION

The Formation of Teacher Expectancies

In the investigations to test for the self-fulfilling prophecy, many of the expectations were false ones, deliberately created in the minds of the teachers. As similar results have been also found using already existing teacher beliefs, it is indeed unfortunate that children in our society are labeled. Labels tell teachers what to expect. Children are described as either slow learners, culturally or socioeconomically deprived, disadvantaged, advantaged, gifted, retarded, deserving, or perhaps barely educable. Existing labels are only one of the great many factors that combine to influence a teacher's perception of his students' abilities and, therefore, his expectations of them. It is important to consider the factors on which these expectations or predictions for success or failure for each student are based.

Before seeing a child actually perform academically, a teacher usually has already compiled numerous ideas about his abilities. Teachers have often seen the child's past grades, or talked to his previous teachers, or seen achievement and intelligence scores, or perhaps even have drawn conclusions from having one or more of
his brothers and sisters in the classroom. Parental income and values, social class, achievement and intelligence test scores, along with skin color, and language ability are the most important of the contributing factors to teacher expectations. In one study it was found that such factors were very important.

Highly prized middle-class status for the child in the classroom was attained by demonstrating ease of interaction among adults; high degree of verbalization in Standard American English; the ability to become a leader; a neat and clean appearance; coming from a family that is educated, employed, living together, and interested in the child; and the ability to participate well as a member of a group.

Our goals in educational policy have come to be no longer based on only "who ought to be educated" but also today on "who is capable of being educated." Pidgeon stated that one of the major factors which influences the expectations of the teacher is what he believes about intelligence and its measurement. When teachers base their predictions on intelligence testing they accept two beliefs: 1) that the estimate of their pupil's potential ability was reasonably accurate and, 2) that the level of achievement

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that the student will show will be consistent with his potential ability.

The real danger of the intelligence test is said to be its ". . . subtle influence upon the mind of the teacher."\textsuperscript{40} The problem is that teachers are constantly being assured in their classrooms that these test measurements do give reasonably accurate estimates of potential ability. They base their expectancies on these test scores, either high or low, and as a result the child's performance seems to be consistent with them. As Merton\textsuperscript{41} stated "the specious validity of the self-fulfilling prophecy perpetuates a reign of error. For the prophet will cite the actual course of events as proof that he was right from the beginning."

What is important, even perhaps critical about intelligence tests and scores is the way that the teacher makes use of the information. The specific information about the child must be seen " . . . as merely hypothesis—the best guess at the moment."\textsuperscript{42} For children from disadvantaged homes, the initial measurement of potential may be totally invalid. His background experiences and verbal ability are not always conducive to high test scores. If the intelligence test called for the

\begin{footnotes}


\textsuperscript{42} Good and Brophy, "The Self-Fulfilling Prophecy," p. 53.
\end{footnotes}
child to read the questions, a low score may only indicate a reading disability.

Differences in intellectual capabilities undoubtedly do exist, but teachers need to constantly re-evaluate their assumptions of students' abilities. The consequences of labeling children need to be investigated. What are the harmful expectations produced in the minds of teachers when they are told that "... a child is educable but slow, deserving but disadvantaged?"\(^4\) In many ways a teacher has "... little encouragement to see the child as the child is, and so depends upon test scores, or other advertisements, such as skin color or family income."\(^4\) This has relevance to the self-fulfilling prophecy because as Glock\(^5\) stated "... once teachers predict learning ability they are motivated to make these predictions come true."

**Student Perception of Teacher Expectancies**

How do expectancy effects operate in the classroom? Can they be used to the advantage of the student and not against him? To answer these questions, one must examine the teacher's role in conveying his expectancies or predictions to the student.

After a reanalysis of his data, Rosenthal proposed a four-factor theory to explain the process that accounts for the increases


\(^5\)Mark Harris, "Teaching Is a Form of Loving," *Psychology Today* 7 (September 1973): 59.

\(^5\)Marvin D. Glock, "Is There a Pygmalion in the Classroom?" *The Reading Teacher* 25 (February 1972): 407.
in intelligence because of teacher expectancy changes. Teachers who expect good performance from certain students he stated, tend to:

1) create a warmer social-emotional mood around their "special" students (climate);

2) give more feedback to these students about their performance (feedback);

3) teach more material and more difficult material to their special students (input); and

4) give their special students more opportunities to respond and question (output).46

Teachers encourage students more when they expect more from them. They call on the students more often, ask them more difficult questions, and prompt them toward the right answer. Unconsciously the teacher alters his teaching techniques to make his expectancies and predictions come true. As Rosenthal stated "one prophesies an event, and the expectation of the event then changes the behavior of the prophet in such a way as to make the prophesied event more likely."47

Brophy and Good feel that if teacher expectancy does have an important effect, it should be expressed clearly in statements of outcomes of observable sequences of behavior. The aura of magic about expectations and their dramatic effect should be dispelled. In their investigations they assumed that:

(a) The teacher forms differential expectations for student performance; (b) He then begins to treat children differently in accordance with his differential expectations; (c) The


children respond differentially to the teacher because they are being treated differently by him; (d) In responding to the teacher, each child tends to exhibit behavior which complements and reinforces the teacher's particular expectations for him; (e) As a result, the general academic performance of some children will be enhanced while that of others will be depressed, with changes being in the direction of teacher expectations; (f) These effects will show up in the achievement tests given at the end of the year. . . . 48

Good and Brophy emphasized that their work does not mean "... that any expectation is, ipso facto, going to come true." 49 They did mean that teachers can communicate their expectations to children by changes in their behavior which are based on expectations. It is not therefore limited to subtle voice nuances and expression changes, but also includes overt changes in teacher behavior.

In another investigation Good wished to determine if teachers "... call on pupils perceived as high achievers significantly more than they call on pupils perceived as low achievers." 50 He asked the teachers to rank students' achievement and used this as a measure of existing expectations. He found that teachers do treat pupils differently and therefore, students do not get equal opportunities in the classroom.

There are many reasons for asking questions and teachers try to choose the students who will satisfy their specific purpose. In other


49 Good and Brophy, "The Self-Fulfilling Prophecy," p. 52.

words, choosing students to answer questions is not randomly done. If the purpose of the teacher is to motivate the class, the teacher will call on a student whom he feels will respond appropriately and not on a pupil who consistently gives incorrect answers.  

Good also concluded that teachers who need proof that they are doing a good job, may call upon students they know will respond correctly. When teachers want reenforcement they naturally will not call on the students of low ability or who they perceive as having low potential.

Also, teachers starting with good intentions, may limit the chances for their slower pupils to respond in the classroom "... in the hope of reducing their anxiety and removing them from criticism by their peer group." Good used the analogy of a roulette table "... where the teacher can place bets on pupils' performance and then has the power to manipulate forces that will allow her forecast to be realized."  

It has been stated that "... out of a large group of children and an adult unknown to one another prior to the beginning of the school year, there emerge patterns of behavior, expectations of performance, and a ... stratification system delineating those doing well from those doing poorly." The teacher encourages some

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51 Ibid.
52 Ibid.
53 Ibid.
to respond and others to remain silent.

Having more opportunities to take part in class discussions could cause high expectancy pupils "... to clarify their thoughts more through dialogue with the teacher and to demonstrate their proficiency more frequently." This would lead to better achievement.

He begins to feel the teacher's feelings, the pleasure of approval, and begins to learn more. There comes a time when the issue is not only emotional but intellectual, when a teacher's expectations become a child's sense of prideful achievement, which in turn enables him to expect more of himself.

The Effect of Teacher Expectancies on Student Self-Concept

In dealing with the effect of teacher expectations on academic performance, one aspect was to develop an understanding of how a student's perception of his teacher's beliefs and feelings about him could affect his self-concept and how this in turn could relate to his success in school. Purkey stated that "the almost unavoidable conclusion is that the teacher's attitudes and opinions regarding his students have a significant influence on their success in school." Perhaps teacher expectations can affect other things not as dramatic as intelligence test scores, such as how students feel about themselves and school.

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56 Coles, "What Can You Expect?" p. 177.

It has been found that when a teacher believes that his students can achieve, the students are more successful, and that low teacher expectations influence a student's performance negatively. By setting different levels of expectations the teacher imposes on certain children a diminished self-concept. To a significant extent the teacher "... predetermines the child's developing image of himself not only as a pupil but as a person." 58

The ways significant others evaluate the student directly affects the student's conception of his academic ability. This in turn establishes limits on his success in school. 59

For the purpose of this paper the self-concept was defined as the individual's perception of himself. As the self-concept is acquired, its development is contingent on many factors. Because a child spends such an extended length of time each day in the classroom, it is not hard to see that his teacher does have a great impact and could very well be one of the most important shaping forces on his developing concept of self.

Rosenthal mentioned changes in self-concept only in positive ways when he discussed the performances of students for whom teachers had high expectations. He stated that changes in teacher-student communication along with altered teaching techniques "... have helped the child learn by changing his self concept, his expectations


59 Purkey, Self Concept and School Achievement, p. 47.
of his own behavior, and his motivation, as well as his cognitive style and skills.\textsuperscript{60}

"A basic assumption of the theory of the self concept is that we behave according to our beliefs."\textsuperscript{61} If this assumption is accepted, then it follows that a teacher's beliefs about his students are crucial because they cause the teacher to differentiate his behavior toward them. Good and Brophy concluded that low teacher expectations can interfere with a student's achievement in two basic ways. The teacher's resulting behavior 1) limits the amount of material that the student can learn 2) and stifles the student's motivation and gives him a feeling of alienation.\textsuperscript{62} Resulting teacher behavior "... separates low achievers from classroom life and militates against their educational progress."\textsuperscript{63}

Davidson and Lang\textsuperscript{64} noted that the student's perception of the teacher's feelings toward him correlated positively with his self-perception. Also the more positive the student's perceptions of the teacher's feelings, the better his achievement.

It is very difficult to hide true feelings from children. They

\begin{thebibliography}{99}
\bibitem{60}Rosenthal and Jacobson, \textit{Pygmalion in the Classroom}, p. 180.
\bibitem{61}Purkey, \textit{Self Concept and School Achievement}, p. 45.
\bibitem{62}Good and Brophy, "The Self-Fulfilling Prophecy," p. 52.
\bibitem{63}Good, "Which Pupils Do Teachers Call On?" p. 197.
\bibitem{64}Davidson and Lang, "Children's Perceptions of Their Teachers' Feelings Toward Them Related To Self-Perception, School Achievement and Behavior," p. 116.
\end{thebibliography}
pick up very subtle cues for their perceptions of adult expectations. If the teacher who expects achievement shows it through actions, so does the teacher who does not. The teacher who conveys hopelessness for her pupils usually does it without ever verbalizing his attitude. He does not have to; every subtlety of his behavior conveys his low expectations to the students. This is important because it seems that,

... any behavior of significant people that causes a young child to think ill of himself, to feel inadequate, incapable, unworthy, unwanted, unloved, or unable, is crippling to the self.65

It has often been noted that a student's achievement is closely related to his own conception of his abilities. With time if a student keeps on perceiving himself as a failure, his continual lack of success will be reflected in his self-concept.66 This could have profound effects on the child's achievement in school. Teachers need to believe in the potential of their students. Purkey has stated that "perhaps the single most important step that teachers can take in the classroom is to provide an educational atmosphere of success rather than failure."67 "... Smile at your student; tell him he can, even if you doubt it, and he might."68

65 Purkey, Self Concept and School Achievement, p. 33.
66Glock, "Is There a Pygmalion in the Classroom?" p. 408.
67Purkey, Self Concept and School Achievement, p. 55.
68Harris, "Teaching Is a Form of Loving," p. 59.
Effects of Low Expectations for Students

In trying to determine how expectations and predictions were communicated to the students, the emphasis has been on the effects on students for whom teachers had high expectations. But what are the consequences then of low expectations for certain children? Can teacher expectancies actually "... serve as building blocks which may tend either to promote or to block achievement opportunities for students?" 69

It has already been found in an investigation by Good that students perceived by teachers as low achievers were deprived of opportunities to respond in classroom situations. A teacher often praises a correct response, criticizes or corrects an undesirable answer, or perhaps asks for an explanation or for the student's further thoughts on the subject. In one study it was found that teachers gave no such feedback to low expectation students 14.75 percent of the time as compared to only 3.33 percent of the time for high expectation students. 70 How does this difference in teacher behavior affect these students who as Good said "... daily march to a factory that isolates them and affords them limited compensations and rewards." 71


71 Good, "Which Pupils Do Teachers Call On?" p. 196.
It is strange educational strategy that attempts to transform low achievers whose language skill is usually underdeveloped, into successful classroom participants by ignoring them. The low achievers have limited skills and short attention spans. If limited opportunity to respond and negative feedback are the classroom prescription, the treatment will surely fail to help low achievers overcome their deficiencies. The treatment is more likely to sustain inadequacies and contribute to an educational demise.\(^\text{72}\)

The results of low teacher expectations can more clearly be seen when viewing disadvantaged students. Ghetto children's academic performance tends to decrease proportionately as they remain in school. Many teachers of disadvantaged children expect their pupils to be unable to learn. As teacher expectancies are related to student expectancies, the problem is apparent. If little is expected from pupils in a particular school, the pupils will tend to develop a similar low expectation of their own abilities.\(^\text{73}\)

Good called this the end result of a process that begins when "... difficulties in teaching the lows erode the teacher’s confidence in his ability to teach them."\(^\text{74}\) The teacher then feels that perhaps these students are unable to learn like the others. As this attitude becomes more firmly set, the child's chance of failure becomes assured. Good said that the teacher may no longer really try to work with these children. A teacher will just go through the motions each time "... of teaching them just long enough to reassure himself that the children

\(^{72}\text{Ibid.}\)

\(^{73}\text{Pidgeon, Expectation and Pupil Performance, p. 16.}\)

\(^{74}\text{Good and Brophy, "The Self-Fulfilling Prophecy," p. 52.}\)
indeed cannot learn." This seems to be consistent with Rosenthal's findings of the hazards of unpredicted success. He found that when a child that was not expected to do well actually did, the teacher looked upon his behavior as undesirable. The better the low-expectancy child performed, the less well they were regarded by the teachers.

All attention is focused on disadvantaged children's failures, as the teacher is more tuned to finding evidence of failure than success. The teacher sees what he expects to see, and unfortunately the student sees what the teacher sees. If the teacher does not notice when the student is doing adequate work, the opportunity is lost to reinforce the behavior. Teachers see what they are told to expect and whatever actions the student shows that are not consistent are disregarded. "It's a bad system, in which the teacher hasn't time to see the child behind the expectation." Teachers need to encourage these children and praise the success that they do show, and be very slow in criticizing them.

In the eyes of the child, the school can become "the enemy, distributing failure and defeat..." Some students would rather give up, because to make attempts to learn causes them to suffer continual humiliation.

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75 Ibid., pp. 52-53.
77 Harris, "Teaching Is a Form of Loving," p. 59.
78 Purkey, Self Concept and School Achievement, p. 41.
Once a child becomes convinced that school is not the place for him, that it is a place of threat and anxiety where he cannot hope to succeed and where his identity is lost, then the school as well as the student is in a very difficult position.\textsuperscript{79}

Glock suggested that one should study carefully the educational system "... which seems to have a built in program of failure."

According to this system "... a certain percentage ... are expected to fail," and the teacher because of his expectations may be the sustaining factor in the system.\textsuperscript{80} Bloom\textsuperscript{81} has been quoted as describing the entire educational process as one large self-fulfilling prophecy.

Each teacher begins a new term (or course) with the expectation that about a third of his students will adequately learn what he has to teach. He expects about a third of his students to fail or to just "get by". ... This set of expectations, supported by school policies and practices in grading, becomes transmitted to the students through the grading procedures and through the methods and materials of instruction. This system creates a self-fulfilling prophecy such that the final sorting of students through the grading process becomes approximately equivalent to the original expectation.\textsuperscript{82}

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\textsuperscript{79}Ibid., p. 42. \\
\textsuperscript{80}Glock, "Is There a Pygmalion in the Classroom?" p. 407. \\
\textsuperscript{81}Benjamin S. Bloom, "Learning for Mastery," Evaluation Comment (May 1968): 1, cited by Good, "Which Pupils Do Teachers Call On?" p. 190. \\
\textsuperscript{82}Ibid., pp. 190-192.
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CHAPTER IV

CONCLUSIONS

Implications for Education

In view of the research and findings, several implications of the expectancy effect for education have become apparent. Some popular accounts of the self-fulfilling prophecy have been misleading, and have caused a lot of confusion when they seem to imply that the mere existence of an expectation will bring about its own fulfillment. Good stated that the real problem results when teachers recognize this idea as "utter nonsense" and reject it. This he felt, leads teachers sometimes to completely reject the concept of the self-fulfilling prophecy.83

This study of expectancy effects has also shown that there may be yet "... a greater tragedy than being labeled as a slow learner, and that is being treated as one."84 In many of these studies, teachers were told what to expect, that certain children would make academic gains. In others, the existing expectancies of the teachers were determined and used as vital factors in the investigation. It

83 Good and Brophy, "The Self-Fulfilling Prophecy," p. 52.

is these personal expectancies that teachers have that are important. It is imperative that every teacher be aware of his own expectations for students, and be able to judge whether these predictions are based on reliable factors or perhaps on prejudices.

This study of the self-fulfilling prophecy has also led to the need for the re-evaluation of the harmful effects of grouping students. Ability grouping in classrooms has become prevalent as teachers often see it as the only way to efficiently teach a large number of students and still provide for individual needs and differences. Kohl felt that this grouping is self-perpetuating and, therefore, students would remain in the same ability group throughout their school years. The students in the lower groups and the teacher are aware that they are not suppose to perform academically as well as the other students. It was found in one investigation that "the fundamental division of the class into those expected to learn and those expected not to,
The effect of continual low expectations for a student was found to be very destructive, working to lower the student's self-concept and affecting him not only as a student but as a person. The long range effects of low teacher expectancies needs further study.

Although the expectancy phenomenon in education is seen as valid and worthy of study, it is not considered by most competent researchers as a panacea for all our educational problems.

To assume that expectancy can influence students' academic achievement to some degree seems reasonable. However, to believe that changing expectations will resolve our educational problems is erroneous.

Recommendations for Further Research

Whether or not the self-fulfilling prophecy in education is as pervasive as it is sometimes said to be, it is vital that its results in the classroom be considered. The question for future research is not so much whether there are expectancy effects, but how they operate in the classroom setting. Previous investigations suggest that future research efforts should concentrate on patterns of interaction between the teacher and individual student. There needs to be continued study to discover why a student's perception of teacher beliefs can affect his academic performance.

There also seems to be evidence of a need for further study on the idea of modifying behavior of teachers and students by modifying

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the teacher's perception or label of the student's academic potential. If teachers knew that even their slower students could and should make substantial progress, they would come to expect more from them and perhaps increase their own efforts to insure that more was actually obtained.

Summary

The purpose of this paper was to examine and bring together data and conclusions from research studies and current literature relating to the expectancy effect in education. This problem was felt valid because some popular accounts of the results of investigations in this area have been the cause of much confusion.

The expectancy effect or self-fulfilling prophecy or "Pygmalion Effect" was defined as one person's belief or conception about another that somehow comes to be realized. In reviewing the literature on the subject, an attempt was made to compare the results of other investigations to the results obtained by Rosenthal and Jacobson. In their experiment, Rosenthal and Jacobson reported that changing teacher expectations about intellectual abilities of certain randomly selected children led to changes in intellectual performance. Other attempts to replicate their results have either failed, or substantiated their data only in part.

The work of Heichenbaum, Bowers, and Ross with adolescent juvenile offenders, tended to confirm Rosenthal and Jacobson's findings.
Kester and Letchworth's investigation with high school students, did not, but in not doing so could be seen as evidence to support the hypothesis that the expectancy effect works only to a great degree in younger children. Kester and Letchworth did find that teachers spent more time communicating with pupils they felt were brighter.

After studying their data, Rosenthal and Jacobson concluded that the type of interaction between teachers and students could have led to the increased intellectual gains. Many other studies to test this quality of interaction hypothesis were then done. Brophy and Good in an investigation of teacher-student interaction found that teachers demanded better performance from those students for whom they had high expectations. It was found that students were especially treated differently when they failed to answer a question correctly. Teachers were more willing to work with students when they felt they should be able to respond correctly. The investigation of Rubovits and Maehr also lent further evidence in support of the quality of interaction hypothesis.

Jose and Cody found no significant results when investigating the influence of teacher expectation on young students' intelligence and academic achievement. This study was interpreted in terms of the weakness of the expectancy induction and conclusions were drawn about the superiority of using naturally formed teacher expectations. In this way the teacher-pupil interaction could be observed without the results being dependent on how strongly the expectations were induced.

Palardy found that teacher expectations were a significant factor in the differences between boys' and girls' achievement in
beginning reading. Teachers that expected boys to be just as successful in learning to read as girls, found that in their classroom the boys were equally successful.

One of the major concerns of this paper was to consider how expectancy effects could operate in the classroom. This was done by examining teacher formation of expectancies and how they were conveyed to students. It was found that children in our society are labeled and that these labels are based on many factors often unrelated to shown academic ability. Parental income and values, social class, past performance along with achievement and intelligence test scores, skin color, and language ability were found to be the most important factors.

The teacher's role in conveying his expectancies was examined in detail. It was noted that the teacher subtly alters his actions and teaching techniques to make his expectations and predictions come true. Rosenthal's four-factor theory of changes in climate, feedback, input, and output was presented. The investigation of Good in trying to determine which pupils teachers tend to call on, added evidence to support Rosenthal's theory. It was stated that teachers have reasons for asking questions and they will choose the students who they feel will satisfy their purpose.

There was also an attempt made to understand how a student's perception of his teacher's beliefs and feelings about him could affect his self-concept and how this could in turn relate to his performance in school. The self-concept was defined as the individual's perception
of himself. Davidson and Lang found that a student's perceptions of his teacher's feelings toward him correlated positively with his self-perception, and the more positive the student's perception of the teacher's feelings, the better his achievement in school.

The effects on students of continual low expectancies were also investigated. Researchers noted that if all attention is on children's failures, the opportunity is lost to reinforce any adequate work that is done. It was found that inconsistencies in behavior and performance were disregarded by teachers.

The implications for education relating to the self-fulfilling prophecy were also investigated. It was found that ability grouping if not handled with the utmost care could be detrimental, and that expectancies also play a large part in the education of disadvantaged children. These children that are exposed to continual failure come to expect it of themselves.

Further research was suggested along the lines of how teachers conveyed expectations to students, with a focus on teacher-student interaction. The effect of teacher expectations on student self-concept was also suggested as a factor to be studied in changing performance.

It was the contention of the author that this paper has shown the implications of the self-fulfilling prophecy in education, and has hopefully provided some insight to deal with them as they were found to relate directly to the classroom experience.
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