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ABSTRACT

Social solidarity, the need to relate to significant others, has been identified as a goal that motivates students in classrooms. A study examined a specific instance of social solidarity: the relationship between influential teachers and students they have influenced. One hundred ninety present and former students (from diverse grade levels) and 33 teachers answered questions containing both open-ended items and rating scales. Students responded about particular influential teachers they had encountered; teachers responded about particular students they thought they had influenced. Results from the rating scales revealed that: (1) influential teachers can be characterized along a number of dimensions including competence, warmth, high standards, hostility, and expressiveness; (2) receptive students can be characterized along a number of dimensions including good student, popular, in-trouble, and withdrawn; and (3) teacher and student dimensions are closely related. Results from the open-ended interviews provided insight into how these relationships develop and their importance to both students and teachers. (Six tables are included; 57 references are attached.) (Author/SG)

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INFLUENTIAL TEACHERS AND RECEPTIVE STUDENTS

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## INFLUENTIAL TEACHERS AND RECEPTIVE STUDENTS

## Abstract

Social solidarity, the need to relate to significant others, has been identified as a goal that motivates students in classrooms. This study examines a specific instance of social solidarity: the relationship between influential teachers and the students they have influenced. Students and teachers answered questionnaires containing both open-ended items and rating scales. Students responded about particular influential teachers they had encountered; teachers responded about particular students they thought they had influenced. Results from the rating scales revealed that: 1) influential teachers can be characterized along a number of dimensions including competence, warmth, high standards, hostility, and expressiveness; 2) receptive students can be characterized along a number of dimensions including good student, popular, in-trouble, and withdrawn; and 3) teacher and student dimensions are closely related. Results from the open-ended interviews provided insight into how these relationships develop and their importance to both students and teachers.

"I have often tried to search behind the sophistication of years for the enchantment I so easily found in those gifts. The essence escapes but its aura remains....I was liked, and what a difference it made."

Maya Angelou (1969)

### Influential Teachers and Receptive Students

Recent research dealing with educational achievement has emphasized the importance of social interactions on students' learning, particularly in the learning of language and higher-order thinking skills (e.g. Jones & Idol, in press; Vygotsky, 1978). A central facet of social interactions surrounding learning is that they contain both cognitive and affective elements (e.g., Paris, Olson, & Stevens, 1983; Teale; 1982). The purpose of this study is to explore one aspect of classroom social interactions; that is, the relationship between an influential teacher and a receptive student, how it develops, and what it means to the teacher and the student.

In the context of this study, influential teachers are those identified by their students as being especially memorable or special; receptive students are those identified by teachers as being especially open to that teacher's influence. Such relationships have particular relevance to academic learning because research (e.g., Belmont, 1989; Maehr, 1983; McClelland, 1984) has indicated that the need to relate to significant others

is a primary form of achievement motivation operating within the context of schools.

Maehr (1983), for example, labels social goals "social solidarity" and argues that they are one of four categories of goals that motivate students in school settings; the others include ego goals, extrinsic goals, and intrinsic goals. Ego goals are satisfied by competitive success; extrinsic goals are achieved by obtaining symbolic rewards; and intrinsic goals are satisfied by the satisfaction involved in the task itself. Researchers have amassed rich bodies of literature on ego motivation (e.g., Kohn, 1986); on extrinsic motivation (e.g., Lepper & Green, 1978); and on intrinsic motivation (e.g., Csikszentmihalyi, 1985; Deci, 1975). Less, however, is known about social solidarity motivation.

Consider how Maehr (1983, p. 193) describes social solidarity goals:

..any serious consideration of achievement in the classroom can hardly ignore the fact that pleasing significant others is apparently a critical factor in many instances. Thus, in interaction with the teacher, the student may wish to demonstrate that he or she has good intentions, means well, tries hard, and in this sense is a good boy or girl. To those with social solidarity goals, faithfulness is more important than simply doing the task for its own sake; faithfulness is also more important than doing the task to show that one is better than someone else...

While Maehr's description of social solidarity goals is limited to the goal of gaining approval of significant others, we believe

that the range of social goals is broader than this definition implies. Social ties between student and teacher generate social goals in the student, goals which are not limited to that of pleasing the teacher. Take, for example, an affectional bond between student and teacher. If the student comes to like and care for the teacher, then the student may indeed have the goal of pleasing the teacher. But the student may also want to be taught by, or interact with the teacher simply because it is enjoyable, and he or she may actively seek out the teacher for help or merely for contact. Such activities may be undertaken because they please the student, not because they please the teacher. Also, if the student's affection for the teacher is reciprocated, then the student may enjoy being taught by the teacher because it is clear that the teacher cares about the student and about the student's performance. The student may feel that the teacher's attention is an affirmation of his or her worth and, consequently, may feel more secure and confident. In fact, Bowlby (1979, p. 103), speaking about affectional bonds, argues that, "human beings of all ages are happiest and able to *deploy their talents to best advantage* when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise" (our italics).

On the other side of the coin, an aversive relationship between teacher and student can generate social goals that no teacher would approve of. A student may actively avoid a teacher he or she dislikes, not wish to interact with the teacher, may resist doing what the teacher wants, and may come to reject the learning goals

and standards of the teacher. Such social goals can bring to nothing all the efforts of the teacher.

A good deal of research evidence exists which indicates that social relationships matter to both teachers and students. Researchers in attachment theory, for example, view the process of attachment and bonding as a crucial factor in social development (e.g., Bowlby, 1969). Researchers interested in the nature of literacy and its acquisition often touch upon the importance of social relationships (e.g., Bateson, 1972; McDermott, 1976, 1977; Scollon, 1988; Tannen, 1985). McDermott's (1976) research, for example, illustrates how relationships among teachers and students can affect the teaching and learning of reading. He writes (p. 397), "According to Bateson's classic distinction, communication involves not only the transfer of information, but also the imposition of a relationship... A communicative act not only has a content which it reports, it also has command aspects which stipulate the relationship between communicants." McDermott was particularly interested in the difficulties that poor black children encountered as they tried to establish relationships with their teachers and he argued (p. 398) persuasively that, "The wrong messages of relationship can result in learning disabilities."

The relationships between teachers and students have been studied by investigators interested in effective teaching (e.g., Brophy & Good, 1974, 1986; Cohen, 1983; Good & Brophy, 1986; Soar & Soar, 1979). Brophy & Good (1986), for example, reviewed an extensive body of research relevant to teacher behavior and student achievement and conclude that negative emotional climate (e.g.,

teacher criticism, pupil resistance, is negatively correlated with student achievement. These researchers cautioned that the data do not indicate that efficient learning requires a positive emotional climate. However, Brophy & Good (1986) cite evidence that indicates positive emotional climate appears more functional for low-SES pupils than for high-SES pupils. In addition, Good and Brophy's (1986) cite Cohen's (1983) conclusion that teachers in effective schools are able to develop a relationship of warmth and trust between themselves and their students. These landmark reviews illustrate the complexity of the issues involved in relationships between teachers and students and underline the importance of these relationships for learning.

Another line of research that is particularly relevant to our study is that conducted by Ruddell and his colleagues (Ruddell, 1983; Ruddell & Haggard, 1982; Ruddell & Kern, 1986). These studies examine the development of belief systems and teaching effectiveness of influential teachers. Ruddell and Kern (1986), for example, interviewed 18 professors at the University of California at Berkeley who had received the campus' Distinguished Teaching Award, in an effort to learn more about their belief systems and teaching philosophy. Ruddell and Kern asked the professors about the teachers who had influenced them. They found that 17 of the 18 outstanding professors had influential teachers themselves; indeed, the professors had encountered, on the average, 5.8 influential teachers from elementary school through graduate school.

Based on interviews with the outstanding professors, Ruddell and Kern classified the characteristics of past influential teachers into five descriptors:

1. *Personal Characteristics*. These teachers demonstrated traits like openness, sensitivity, a sense of humor, and supportiveness.
2. *Understands Learner Potential*. Influential teachers were able to view each student as an individual with unique abilities, needs, and motives.
3. *Attitude Toward Subject*. Influential teachers demonstrated a high level of commitment to, enthusiasm for, and personal involvement in the subject they were teaching.
4. *Life Adjustment*. Influential teachers displayed concern with their students' academic and personal problems by offering support in the form of career counselling, personal advice, and after-class help.
5. *Quality of Instruction*. Influential teachers were perceived as expert instructors whose presentations and explanations were unusually clear and informative.

Ruddell and Kern (1986) uncovered some interesting data using these five descriptors. For example, their data revealed that *Personal Characteristics* had the strongest impact on students at the elementary school level with a decreasing effect as the students advanced through the grades to graduate school. Both *Life Adjustment* and *Quality of Instruction* were more important for the more advanced students. *Understands Learner Potential* and *Attitude*

*Towards Subject* were consistently important across different levels of schooling.

The current study reports on findings from the early stages of a research project aimed at learning more about relationships between influential teachers and receptive students: how they develop and what effect they have on those involved. Our primary focus in the present study was on three research questions:

1. What are the characteristics of influential teachers?
2. What are the characteristics of receptive students?
3. How do the characteristics of influential teachers relate to the characteristics of the students they influence?

In addition, we have begun to gather data that should help us understand what students and teachers gain from these relationships; whether such relationships actually affect academic achievement; and what factors facilitate the development of such relationships.

Our project is a long-term one involving several stages and our current efforts are focused on longitudinal observations of specific sets of influential teachers and receptive students. The data reported here are exploratory; nevertheless, we believe that they present a persuasive argument that the relationships between influential teachers and receptive students are both interesting and of educational significance.

## Method

### Subjects

Since this study was exploratory in nature, we included students and teachers from a variety of schools and students

enrolled at a state university located in a midsize community in the Southeast. The 190 students in our study included children currently in schools as well as adults. These students and former students ranged from 7 to 58 years in age ( $M=15.85$ ;  $SD=10.53$ ). There were 111 females and 79 males. Highest completed grades included second grade through professional school. Forty-four of the students were elementary students; 21 were enrolled in middle school; 27 were high-school students; 62 were undergraduate students; and the remainder were graduate students enrolled in the university.

The 33 teachers who participated ranged from 23 to 62 years in age ( $M=39.06$ ;  $SD=8.44$ ). Twenty-eight of the teachers were female; four were male. Highest grade levels currently attained ranged from Bachelor's to Doctoral degrees. Twenty-eight of the teachers taught in elementary classrooms; the remainder taught in middle-school or in high-school.

### **Materials**

Two survey instruments were developed, one for use with students responding about teachers who had influenced them and one for use with teachers responding about students they thought they had influenced. Both surveys contained open-ended items and rating scales. The survey instrument used with the students, for example, included 24 open-ended questions designed to solicit descriptive information about the influential teacher including his or her age; grade taught; whether the school was urban, rural, or suburban; and any specific things, characteristics, or events that made that teacher special. The 36 items included in the rating scales listed

a full range of personality traits and behaviors that reflected our interest in the characteristics of influential teachers.

The students were directed to think of the most influential or special teacher that they had encountered. They then answered 24 open-ended questions about that teacher, and then rated the teacher on 36 items using a 7-point scale. The students were then asked to recollect how they were when they first met the teacher, and then to make ratings on 27 self-descriptive items.

The instrument for teachers paralleled that described above for students: each item in the teacher's questionnaire was the same as the parallel item in the student questionnaire, except that the question was asked from the teacher's perspective. The teachers were instructed to think of a particular student that they had had a strong influence on, and they completed 23 open-ended questions about themselves and the students they influenced, 36 ratings of how they were at the time they influenced the students, and 27 ratings of what the student was like when they first met him or her.

Classroom teachers administered the questionnaires to students during regular class time. Teachers read the questions aloud to individual students in the second and third grade and recorded the children's answers. The teachers who were subjects in our study completed the surveys individually on their own time.

### Results

We present the results from our analyses as answers to a series of questions. The data derived from the various rating scales provide some initial insight into: 1) the characteristics of

influential teachers; 2) the characteristics of receptive students; and 3) how the characteristics of influential teachers relate to the characteristics of the students they influence. The data derived from the open-ended items helped us learn more about: 1) what students gained from these relationships; 2) what teachers gained from these relationships; 3) whether such relationships actually affect teaching and learning; and 4) what factors facilitate the development of such relationships.

**What are the characteristics of influential teachers?**

According to the ratings presented in Table 1, students rated influential teachers most highly as: someone they could trust (M = 6.63); knowledgeable (M = 6.62); helpful (M = 6.62); able to communicate the content of the course (M = 6.54); caring (M = 6.51); someone who lived up to high standards (M = 6.41); friendly (M = 6.40); fair (M = 6.38); someone who make learning relevant (M = 6.35); hard-working (M = 6.33); enthusiastic (M = 6.29); someone with high expectations (M = 6.21); someone who provided students with recognition (M = 6.20); having a sense of humor (M = 6.13); consistent (M = 6.09); and warm (M = 6.09).

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Insert Table 1 About Here  
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Table 1 also indicates that teachers who had influenced a student described themselves in a similar fashion: someone whom students could trust (M = 6.50); someone who provided students with recognition (M = 6.34); fair (M = 6.32); warm (M = 6.29); enthusiastic (M = 6.28); caring (M = 6.25); helpful (M = 6.22);

someone who praised students ( $M = 6.19$ ); someone who made learning relevant ( $M = 6.06$ ); someone who was able to communicate the content of the course ( $M = 6.06$ ); someone with a sense of humor ( $M = 6.06$ ); knowledgeable ( $M = 6.03$ ); someone who lived up to high standards ( $M = 6.03$ ); friendly ( $M = 6.00$ ); and someone who had high standards ( $M = 6.00$ ).

In order to examine the factors underlying these ratings, a maximum likelihood factor analysis of the student ratings of influential teachers was conducted, followed by a varimax rotation. The solution with five orthogonal dimensions yielded the most interpretable structure (see Table 2).

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Insert Table 2 About Here  
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The first factor measures the degree to which the teacher is competent in his or her classroom role. Teachers high on this dimension of *Competence* are seen by the students they influence to be knowledgeable, helpful, consistent, and able to communicate the content of their courses. They are also enthusiastic and can make lessons relevant. This dimension thus primarily reflects the technical skill of the teacher. The items that load on this factor have an average rating of 6.33 on a scale that ranges from a low of zero (does not describe the influential teacher at all) to a maximum of seven (very characteristic of the influential teacher). This suggests that influential teachers in general have a very high perceived level of competence.

The second factor reflects the extent to which the teacher is affectionate, warm and caring, and so we label it the *Warmth* dimension. Teachers high on this dimension nurture their students and make sacrifices for them. They respond to the student with warm friendliness. The average rating of these items was a high 6.07.

The third dimension measures the extent to which the teacher makes demands on the student. Influential teachers who score strongly on this factor have high standards and expectations, push the student to perform to the best of his or her abilities, and reward performance with praise and recognition. We refer to it as the *High Standards* dimension. As with the first two factors the items that load on this factor had a high average rating: in this case of 5.85.

The fourth dimension is negative. Influential teachers who score highly on this dimension tend to have a temper, to intimidate and criticize students more than do the other teachers, and to make students anxious. We call this the *Hostility* dimension. It may be that teachers who possess these attributes strongly do indeed influence students, but perhaps not always for the good. The average rating of items on this scale was a low 3.18, indicating that relatively few influential teachers have high scores on this factor.

The fifth dimension that differentiates among influential teachers seems to measure how expressive, vivid, and spontaneous their teaching is. Influential teachers who score highly on the *Expressiveness* dimension exhibit a greater flair for the dramatic

and are playful. Such teachers also tend to show their emotions more to students and to share private things with them. Teachers high on this dimension are vivid and memorable. The average item rating on this factor was moderately high: 5.49.

It is not difficult to imagine that influential teachers who differ on some of the above dimensions will have quite different kinds of impacts on their students. Thus the teacher who demands much of his or her students and who does not hesitate to criticize them, may well provoke significant effort in the students, but the effort may not be undergirded by an intrinsic interest in the subject. In contrast, a teacher who responds with encouragement and warmth to a student may be more likely to create an intrinsic interest in the subject that will not be limited to the classroom or the semester.

Part of the nature of some well-known teachers (both fictional and real) seems to be captured by these dimensions. Professor Kingsfield of *The Paper Chase* is high on the *Hostility* and *High Standards* dimensions, for example. Also, Jaime Escalante, whose teaching was portrayed in *Stand and Deliver*, appears to score high on both the *Expressiveness* and *High Standards* dimensions. These examples suggest that influential teachers may not be randomly distributed over the five dimensions, but instead may fall into clusters or types according to their scores on the five dimensions. Our analyses suggest that this may indeed be the case.

An agglomerative, hierarchical cluster analysis (Hartigan, 1977) was computed using the scores of teachers on the five dimensions. The analysis used a cosine measure of similarity

amongst teachers and the average linkage method for clustering teachers on the basis of their similarity scores. Because of this, the teachers that tended to fall into the same cluster were those whose scores on the five dimensions had a similar shape i.e., those teachers who had a similar pattern of rises and falls in their scores on the five variables (Cronbach & Gleser, 1953).

The cluster analysis revealed that the influential teachers rated by our student sample tend to fall into five types, each defined by a pattern of scores on the five dimensions (see Table 3).

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Insert Table 3 About Here  
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As Table 3 shows, the first type of influential teacher might be called the *Technical Expert*. She or he is substantially less warm towards the students than are the other influential teachers and significantly less playful and dramatic in teaching style. However, these teachers are regarded by the students as especially skilled at teaching, and they expect and demand high standards of performance by their students. They comprise some 18 percent of the influential teachers described by our students.

The second kind of influential teacher comes close to being the opposite of the expert. This kind of teacher might perhaps be called the *Empathetic* type, since such teachers are high on the *Warmth* dimension, but are relatively low on *Competence*, *High Standards*, and *Expressiveness*. Presumably, such teachers are influential primarily because of the affection the student feels

for them. They comprise 22 percent of the sample described by our students.

The third group of influential teachers, representing approximately 27 percent of the sample, consists of teachers who might be called *All-Rounders*. Such teachers have high scores on all four positive dimensions and a low score on the *Hostility* dimension. These are teachers who are influential not only because of their demonstrable affection for the students and the vividness of their teaching style, but also because they are somewhat above average in competence and tend to behave with less hostility towards their students than do other influential teachers.

Teachers of the fourth kind may best be characterized as *Emotional* teachers, since they sometimes adopt a hostile and confrontational attitude towards students, are dramatic and playful in their teaching style, and exhibit warmth and friendliness towards the students. The interaction of these teachers with students tends to be volatile and arousing. Such teachers make up 20 percent of the sample.

Teachers of the fifth and final type make relatively few demands of their students and are more emotionally neutral with them: they display less warmth and affection, and also behave with less hostility. It's not clear why such teachers should be influential. One reason may be that they are influential because of attributes we have not incorporated in our questionnaire. Alternatively, it could be that these teachers are not especially influential. They may be average teachers, but simply because they are teachers they have the opportunity to influence students, and

may do so in ways that are unpredictable even to themselves. Whatever the explanation, it seems clear that these teachers have a relatively cool and *Unengaged* style of teaching. Only 12 percent of the sample described by students were teachers of this kind.

A number of implications can be drawn from the above results. One is that being emotionally engaged in the process of teaching seems to be strongly related to being influential. Two of the five kinds of teachers are defined in emotional terms, either by their empathy or by the emotional style of their teaching. We think it would be interesting to discover whether these two kinds of emotional involvement affect students differently. The *Empathetic* teacher may, for example, have maximum impact on distressed students and affect them primarily in psychotherapeutic ways, rather than in a more purely academic fashion. In contrast, *Emotional* teachers may, because of the vividness and memorability of their teaching style, have an impact on a student's enthusiasm for the subject and competence in it. Perhaps the teachers we have labelled *All-Rounders* influence students in both these ways, since they not only display exceptional warmth towards their pupils, but also teach in a dramatic and playful way.

Naturally, it is not only the emotionally engaged teachers that have an impact on pupils, as the existence of the *Technical Expert* category of teacher reveals. We think it would be especially interesting to trace how this style differs from the others in affecting students.

**What are the characteristics of receptive students?**

We turn now to an examination of the dimensions that characterize the students who have been influenced by teachers. The students used the following terms to describe themselves as they were when they were influenced by a teacher: friendly (M = 6.03); having lots of friends (M = 5.63); working hard in class (M = 5.61); good student (M = 5.62); interested in the class (M = 5.52); having high standards (M = 5.52); having a sense of humor (M = 5.51). These ratings are presented in Table 4.

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Insert Table 4 About Here  
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Teachers rated receptive students most highly on a similar set of descriptors: friendly (M = 5.18); had a lot of ability in class (M = 5.06); worked hard in class (M = 5.03); and were interested in class (M = 5.00). These ratings are also presented in Table 4.

We conducted a maximum likelihood factor analysis of the student ratings of themselves at the time they were influenced by the teacher. A four factor solution yielded the most interpretable structure. Table 5 shows the factor loadings after a varimax rotation.

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Insert Table 5 About Here  
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The first factor seems to reflect how good a student the person was at the time they were influenced. We therefore label this the *Good-Student* factor. Students high on this dimension report that

they worked hard at school and in the influential teacher's class; they were the best student in the teacher's class; they had a lot of ability in the subject matter of the class; they had high standards of performance; and they were interested in the class. The items that load on this factor had an average rating of 4.58, which is only moderate, suggesting that receptive students are certainly not uniformly good students.

Students high on a second factor are *Popular*. They had many friends at the time, they were friendly, and had a sense of humor. Again the ratings are moderate for the items that load on this factor: 4.86 on a scale with a maximum rating of seven.

Students who score highly on the fourth factor tend to be *Withdrawn*. They report themselves to have been shy, lonely, and generally anxious. The rather low rating of these items (3.41) suggests that relatively few receptive students are especially *Withdrawn*.

The final dimension measures the extent to which the student was *In-Trouble* at the time that he or she was influenced by the teacher. Students who score high on this factor report having been in trouble with their teachers and at school in general. They always had an excuse for not working, and had a temper. Like those on the *Withdrawn* dimension, items on the *In-Trouble* factor have a relatively low rating (3.51), suggesting that few receptive students are *In-Trouble*.

Although the four dimensions were derived from ratings of how the students were at the time they were influenced by the teacher, the ratings are confounded with general self-descriptions of

students, and so we do not wish to make a strong claim that these dimensions uniquely describe students who are particularly receptive to teachers. Rather they may be general dimensions underlying student self-descriptions. Their relevance lies not so much in their content per se as in their relation to the types of teachers the students were influenced by. We take up this issue in the next section.

**How do the characteristics of influential teachers relate to the characteristics of the students they influence?**

A multivariate analysis of variance was computed on the differences among the five types of teachers on the factors that differentiate the receptive students. The overall difference amongst teacher types was significant ( $\chi^2 = 39.41$ ,  $df = 16$ ,  $p < .001$ ). Only the first and second factors (*Good-Student* and *Popular*) yielded significant univariate results, however ( $F(4,142) = 3.94$ ,  $p < .01$ , and  $F(4,142) = 3.05$ ,  $p < .05$ , respectively).

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Insert Table 6 About Here  
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An inspection of Table 6 suggests that students who were *Popular* were more likely to be influenced by *Emotional* teachers and least likely to be influenced by *Unengaged* teachers. *Popular* students thus seem to prefer a more dynamic and affective style of teaching. This contrasts with good students. These students were least likely to be influenced by *Empathetic* and by *Unengaged* teachers, and were most likely to be influenced by *All-Rounders*. Such students thus appear to respond best to a balanced teaching

approach, one that combines expertise and high standards with warmth and dynamism. As students who put a good deal of effort into academic performance, they are less likely to be influenced by teachers who are merely expert or merely emotional and warm.

There is some suggestion from (non-significant) differences on the third factor that students in trouble at school are more influenced by *Emotional* teachers and least by *Technical Expert* teachers. This may imply that such students are not interested in school work, but can be influenced by a dynamic and affective approach to teaching.

The four student factors seem to fall into two groups depending on the type of teacher who is most influential with the student. As mentioned earlier, the good students are most receptive to teachers who are *All-rounders*. In contrast, the teacher type who is most effective with other students is the *Emotional* teacher. For students in trouble, for those who are withdrawn, and for those who are popular, it is the *Emotional* teacher who is most influential. These three student dimensions seem to be related to the affective state of the student, with popularity being related to happiness, withdrawal to anxiety, and being in trouble to anger and resentment. It may be that caring, dynamic, and arousing teachers are especially influential with students who characterize themselves in these affective ways.

The analyses presented so far concern data derived from rating scales. Recall, however, that we also asked a number of open-ended questions. We turn now to these data.

We examined each subject's responses to the open-ended items in order to obtain preliminary data on a number of issues. These include questions about what students gain from relationships with influential teachers; what teachers gain from these relationships; how such relationships affect achievement; and how the relationships develop.

We identified and compiled all of the subjects' responses that were relevant to each issue, and then, for the purpose of the discussion below, we selected those responses that were most representative of the themes and patterns that emerged from the data.

#### **What do students gain from these relationships?**

Growth and self-confidence are themes echoed repeatedly in the student responses. Consider these responses, for example:

"She helped me overcome my shyness and I greatly admired her."

"I learned to respect myself and others."

"He enhanced my inner courage."

"She gave me enough security to like myself."

The responses from the teachers revealed the same themes as those from the students. Here are some samples from teachers:

"I think I helped her see herself as a worthwhile person when her parents were telling her she was not."

"I think his self-confidence and pride in neatness rose as a result of this encounter."

These responses touch upon one of the more intriguing questions about the relationship between an influential teacher and a receptive student: what are the processes inherent in relationships

with significant teachers that facilitate the growth of self-confidence and self-worth in students who previously lacked these feelings? Clearly, individuals use others' feelings towards and reactions about them as one major source of information about self-worth (e.g., Markus & Nurius, 1986), but it is not as yet clear what it is that enables a teacher to be a primary source of such information.

**What do teachers gain from these relationships?**

The open-ended responses from teachers offer some insights into how receptive students can enhance teachers' sense of efficacy (Ashton, 1985; Woolfolk & Hoy, 1990). This is no small finding given that teacher efficacy is related to a variety of critical variables including teachers' perceptions of student achievement (Armor, et. al., 1976), teachers' attitudes towards instructional innovation (Guskey, 1988), and teachers' classroom management strategies (Ashton & Webb, 1988). Consider the following responses culled from the teachers' protocols:

"He built up my self-confidence as a teacher. His energy was catching."

"He made me appreciate the influence I could have on another person."

"Reinforced that labels, either formal or informal, can be very negative , even to a young child."

"She gave me hope as a teacher of helping students that many others thought were lost causes."

Woolfolk and Hoy (1990) argue persuasively that teachers' sense of efficacy is a construct consisting of two independent

dimensions: teaching efficacy - the expectation that teachers in general can or can not make a difference; and personal teaching efficacy - the teacher's expectation that he or she can personally make a difference. The responses we obtained from our teachers seem to touch upon both dimensions, but it would be useful to explore systematically how teachers' sense of efficacy change as a result of their relationships with receptive students.

**Do such relationships affect achievement?**

Responses from both students and teachers indicate that social relationships do indeed affect achievement. More rigorous data need to be gathered, but consider the following comments:

Student responses

"One day I recall her asking a question and I was sure I knew the answer. I answered incorrectly, the class laughed and I went through the floor with embarrassment. She told me later to keep applying myself and not to be afraid of being wrong."

"He really got me interested in the subject matter because he cared so much."

"She made me want to learn - she had high expectations of me and so therefore it made me have high expectations of myself."

"They can relate the importance of a skill and convince you that you desperately need to master it. They sense what you need to be competent."

"She influenced my opinion about literature so much that I began to enjoy it."

Teacher responses

"I felt like this student did not want to accept responsibility for his sloppy work. If he could avoid being accountable to me, he didn't have to change. The eye contact established the relationship and made him feel a responsibility to be accountable."

"In the beginning of the school year, we were writing stories. He was a little anxious about his. I found it very humorous and told him so. The praise really began his receptiveness."

"The first sentence she read, I said, 'Theresa, you can read! Isn't that great?' Her face lit up and from then on, she wanted to read more... She did read and went through several levels."

These comments from both students and teachers seem to capture key instances where influential relationships made a difference in student learning. These anecdotes contain both substantive and motivational elements (Teale, 1982) and they help flesh out the numerous correlational and experimental studies that link teacher characteristics and behaviors to student learning (e.g. Brophy & Evertson, 1976; Good, 1979).

**What facilitates the development of influential teacher-receptive student relationships?**

Both students and teachers had some opinions about what factors influence the development of teacher-student relationships. Notice how their responses echo Scollon's (1988, p. 27-28) belief that authentic communication depends upon the teacher's ability to relate to the student as an individual rather than categorize him or her as a "matrix of general statements -- a student, ... a

quick learner, a learning disabled child, a right-brained or a left-brained learner or any of the rest..."

Student response

"She made us feel important without treating us like little children. She looked to us as equals and we respected her for that."

"Individualized attention. Pushed kids to their limits, while recognizing that kids' limits differ."

"At the time, it seemed unusual; she broke her leg! That was when I realized that teachers were human too."

Teacher responses

"I think a first year teacher has a special teacher/student chemistry because of the students' appreciation of the 'newness' of approach, and the teacher's excitement and enthusiasm in a first job. Add to that, this student's appreciation of extra attention which she more than earned. She wanted to do more and more, and I loved finding new projects for her. It was mutually gratifying."

"I didn't have a lot of preconceived ideas, and so didn't 'write him off'."

"He made me realize that all children who have difficulty in school may not be because they don't understand the subject."

These responses suggest that influential relationships develop when teachers and students are able to move beyond their roles as teacher and student, and instead develop a important human relationship. The importance of relationships in education is not news, of course. What is important, however, and what the study of

influential teachers and receptive students has to teach us is how these particular teachers and students are able to make the relationships work in the harsh environments so often found in schools.

#### Discussion

These preliminary results offer a glimpse into the nature of teacher-student relationships and their effects on teaching and learning. These data corroborate and extend the results of earlier studies (e.g., Guskey & Easton, 1973; Ruddell & Kern, 1986) that indicated influential teachers display a number of similar characteristics including positive traits like openness and sensitivity; an understanding of and a concern for their students as individuals; a high level of commitment to their subject area; and an unusual ability to communicate the course content to their students. The data from this study extends the findings of earlier studies by emphasizing that influential teachers can display a wide variety of characteristics including some negative ones.

The data from this study also extends the results of earlier research by proposing a tentative description of the kinds of students that are receptive to these relationships. Some receptive students display positive personal characteristics including friendliness and a sense of humor; relatively high levels of ability and interest in the subject area; and a willingness to work hard. Other receptive students are having trouble in school, or are shy, lonely or anxious.

The data offer some interesting answers to the question of how the characteristics of influential teachers relate to the

characteristics of receptive students. Our results confirm and extend the findings of earlier studies that argue for the richness of variety and against the mythology of a single model of the ideal teacher (e.g., Brophy & Good, 1986; Dillion, 1989; Graham, 1984; Kleinfeld, 1975; Sroufe & Fleeson, 1986).

It is interesting as well, to note that both students and teachers apparently gain a great deal from these relationships. Students referred often to how influential teachers helped them to discover hidden personal traits and to grow in important ways. Teachers credited these relationships with providing a sense of increased confidence and efficacy in their own teaching ability.

The data obtained from this initial survey of 190 students and 33 teachers is limited. Nonetheless, the open-ended comments indicate that relationships between influential teachers and receptive students do appear to increase the level of motivation, interest, and confidence of both students and teachers. Even findings as tentative as these are encouraging since recent research has stressed the importance of such affective variables in teaching and learning (e.g., Ames & Archer, 1988; Paris, Lipson & Wixson, 1983; Woolfolk & Hoy, 1990).

What are the implications of this study for the theoretical framework for achievement motivation that we presented in the Introduction? Recall that the impetus for this study originated in our argument that educational researchers know a good deal about ego, extrinsic, and intrinsic motivation and relatively little about the nature and effects of social motivation on teaching and learning. Moreover, we argued that social motivation entailed more

than simply gaining approval of significant others as Maehr (1983) has suggested. Our findings suggest that social motivation is quite complex in teacher-student relationships.

Is it possible that influential teachers can help some students gain the necessary self-confidence to overcome their school difficulties and perhaps stay in school rather than drop out? It is possible that influential teachers' enthusiasm for their subject-matter might be "contagious" in the sense that receptive students will come to value literature, science, math, or history? There is some intriguing evidence that such relationships might, in fact, make a difference. Bronfenbrenner (1986) makes the case for a curriculum for caring as one way that schools can counteract the alienation of the young. Mann (1986) argues that caring about and personal contact with poor students is a critical component of successful intervention programs, and he feels that our schools should be as worried about becoming "high touch" as they do about becoming "hi tech."

One of the findings from the Ruddell and Kern (1986) study cited earlier was that the outstanding professors interviewed tended to emulate their influential teachers. Influential teachers may offer receptive students what Markus and Nurius (1986) call "possible selves." As Markus and Nurius (1986, p.954) point out, "Many of these possible selves are the direct result of previous social comparisons in which the individual's own thoughts, feelings, characteristics, and behaviors have been contrasted to salient others. What others are now, I could become." For many

children, these positive models of possible selves may be the most important lesson they learn in their years at school.

The findings in this study also emphasize the importance of examining the effects of social motivation on teachers as well as the possible effects on students. As Hartup (1989, p. 121) points out, "Two individuals are developing within every relationship, not one."

One of the most urgent issues facing American education is enhancing the quality of the teachers' morale. It is estimated that almost one-third of teachers leave the profession within their first five years of teaching (Schlechty & Vance, 1983), and a growing body of research (e.g., Frymier, 1987; Lortie, 1975; McLaughlin, Pfeifer, Swanson-Owens, & Yee, 1986) has provided us with a clear picture of the conditions that make too many teachers cynical, apathetic, and detached.

This same body of research has also helped us understand what kinds of incentives are most important to teachers. An important motivation and source of satisfaction for most teachers is their ability to connect with students and watch them grow. The results of this study remind us that, like the students in their classes, teachers are more interested in social solidarity goals and intrinsic goals than they are in ego or extrinsic goals. This is not to say that status and money are unimportant; rather they are not the goals that attract and retain teachers (Stern, 1986).

Influential relationships are also powerful testimony that some teachers can resist the pressures and problems that drive too many

others to apathy and alienation. This is important, for as Masikszentmihalyi and McCormack (1986, p. 419) argue:

(Young people) need knowledge that helps them understand why learning and living are worthwhile.

But how can young people believe that the information they are receiving is worth having, when their teachers seem bored, detached, or indifferent.... To the extent that teachers cannot become joyfully involved in the task of teaching, their efforts will largely be in vain.

Perhaps by studying the relationships between influential teachers and receptive students in more detail, we can help more students and teachers become fully involved in education.

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Table 1

Mean Ratings of Descriptions of Teachers

Description	Student rating Teacher rating	
	of teacher	of self
Strict	4.76	4.45
Caring	6.51	6.25
Had high standards	6.09	6.00
Knowledgeable	6.62	6.03
Lived up to own standards	6.41	6.03
One could trust what teacher said	6.63	6.50
Warm	6.09	6.29
Affectionate	5.42	5.58
Communicated content	6.54	6.06
Nurturing	5.74	5.66
Pushed student to perform	5.95	5.47
Made sacrifices	5.66	5.25
Hard-working	6.33	5.78
Playful	5.64	5.58
Loving	5.78	5.65
Had high expectations	6.21	5.88
Had a sense of humor	6.13	6.06
Fair	6.38	6.32
Had a temper	3.77	3.32

Table 1 (Contd.)

Consistent	6.09	5.81
Gave student recognition	6.20	6.34
Made learning relevant	6.35	6.06
Enthusiastic	6.29	6.28
Helpful	6.62	6.22
Showed emotions	5.38	4.90
Explained his/her purpose	5.90	5.55
Business-like	4.27	4.56
Friendly	6.40	6.00
Praised student	5.68	6.19
Gave varied lessons	5.91	5.81
Conducted fast-paced lessons	4.76	5.10
Made student anxious	3.20	2.81
Intimidated students	2.59	1.94
Criticized students	2.30	2.34
Had a flair for the dramatic	4.22	4.03
Shared private things with student	4.38	4.72

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Note. Item response format: 1 = strong no (not at all characteristic), to 7 = strong yes (very characteristic). The number of ratings by teachers was 33, and the number of ratings by students was 190.

Table 2

Factor Structure of Student Ratings of Teachers

Student's description of teacher	Factor				
	1	2	3	4	5
Knowledgeable	74				
Helpful	73	33			
Communicated content	65				
Explained his purpose	56				
Had a sense of humor	55				42
Lived up to own standards	52				
Fair	49				
Consistent	42		40		
Gave varied lessons	40				
Made learning relevant	38				
Enthusiastic	36				
Loving		85			
Warm		77			
Affectionate		76			
Nurturing		59	37		
Friendly	34	49			
Caring		43			
Made sacrifices		43			37

Table 2 (Contd.)

Had high standards		53	
Had high expectations	45	49	
Pushed student to perform		49	
Hard working		47	
Praised student		46	41
Strict		45	
Gave student recognition		41	37
One could trust what teacher said	31	40	
Intimidated students		73	
Had a temper		55	
Made student anxious		54	
Criticized students		53	
Business-like		32	36 -30
Playful	52		64
Had a flair for the dramatic			40
Shared private things with student			35
Showed emotions	35		35

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Note. All loadings have been multiplied by 100, and only factor loadings greater than or equal to  $|\ .30 |$  are shown.

Table 3

Means of the Five Teacher Types on the Five Factors

Teacher type	Factor				
	Competence	Warmth	High Standards	Hostility	Express- iveness
Tech. Expert	6.35	5.14	5.98	3.86	4.77
Empathetic	5.85	6.00	5.50	3.26	4.76
All-rounder	6.75	6.75	6.25	2.05	6.24
Emotional	6.44	6.40	6.16	4.63	6.12
Unengaged	6.09	5.53	4.87	2.22	5.21

Note. Range of scores: 1 = strong no (not at all characteristic),  
to 7 = strong yes (very characteristic).

Table 4

Mean Ratings of Descriptions of Students

Description	Student rating	Teacher rating
	of self	of student
A good student	5.56	4.56
Shy	3.59	3.97
Lonely	2.84	3.58
Popular	4.57	4.03
Sense of humor	5.51	4.74
Worked hard in school	5.43	4.66
Friendly	6.03	5.18
Interested in the class	5.52	5.00
Self-confident	4.97	3.71
Knew what wanted to do as adult	3.67	3.16
Expressed emotions easily	4.71	4.20
Had high standards	5.22	4.62
Had lots of adult friends	4.57	3.41
Was serious about life	4.66	4.77
Had a temper	4.48	2.86
Was the best student in the class	4.06	3.35
Worked hard in the class	5.61	5.03
Had a lot of ability in subject	5.48	5.06
Had lots of friends	5.63	4.29

Table 4 (Contd.)

Generally anxious	3.80	2.71
Always had an excuse for not working	3.15	2.71
Was having trouble at school	2.54	3.65
Was having trouble with parents	1.90	3.52
Was having trouble with teachers	2.44	3.43

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Note. Item response format: 1 = strong no (not at all characteristic), to 7 = strong yes (very characteristic). The number of ratings by teachers was 33, and the number of ratings by students was 190.

Table 5

Factor Structure of Student Ratings of Themselves

Student's description of self	Factor			
	1	2	3	4
Worked hard in school	76			
A good student	75			
Worked hard in the class	68			
Had high standards	64			
Was serious about life	60			
Was interested in the class	53			
Self-confident	49	36		
Best student in the class	44			
Had a lot of ability in subject	42			
Expressed emotions easily	38			
Was having trouble with parents	-36			
Knew what wanted to do as adult	33		32	
Had lots of friends		82		
Popular		73		
Had lots of adult friends		43	35	
Friendly		38		
Had a sense of humor		35		

Table 5 (Contd.)

Was having trouble with teachers		50	
Was having trouble at school	-43	48	
Always had an excuse for not working		41	
Had a temper		41	
Shy		-57	63
Lonely	-37		53
Generally anxious			47

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Note. All loadings have been multiplied by 100, and only factor loadings greater than or equal to  $|.30|$  are shown.

Table 6

Means of the Five Teacher Types on the Four Student Factors

Teacher Type	Student Factor			
	Good-student	Popular	In-trouble	Withdrawn
Technical Expert	4.51	4.77	3.00	3.30
Empathetic	4.20	4.65	3.59	3.35
All-rounder	4.91	5.04	3.64	3.20
Emotional	4.87	5.41	4.13	3.78
Unengaged	4.23	4.41	3.42	3.14

Note. Range of scores: 1 = strong no (not at all characteristic), to 7 = strong yes (very characteristic).