Findings of 50 case studies that were designed to help teachers motivate students are presented in this paper. Each study followed the same process, in which student motivation was assessed by the Student Motivation Diagnostic Questionnaire (Matthews and Brown, 1988), questionnaire results were presented to teachers participating in the case studies, and study administrators worked with the teachers to generate alternative behaviors. Findings indicate that most administrators are able to identify teachers of classes with motivational deficiencies and that administrator support and monitoring has a positive effect on teachers' ability to improve aspects of student motivation. In addition, the administrator position power base can be critical for changing teacher behavior. Finally, improvement in one aspect of motivation may be accompanied by a decline in another aspect of motivation. Although the model appears to be more effective when each teacher has an individual target variable, groups of teachers can share and improve a common target variable if their administrator has a strong position power base. A list of authors is included. (Contains 10 references.)
HELPING TEACHERS MOTIVATE STUDENTS:

SIXTEEN CASE STUDIES

(With reports on 34 other studies in process)

Kenneth M. Matthews  Patricia A. Lowrie
Barbara C. Roquemore  Judith Mahaffey
Georgia B. Beasley    Charlotte McNeely
Deanna Fraker         Marianne Melnick
David Franks          Marilyn Osborn
John P. Green         Joanna Ramos
Larry W. Hulvey       Lynda C. Royal
Jacquelyn Littlefield William Schofield

Dianne D. Shafer
Elizabeth Youngblood

Portions of this paper were taken from a paper presented at the American Association of School Administrators' Conference in February, 1992 in San Diego, California under the title of "Helping Teachers Motivate Students: Seven Schools - Seven Case Studies" and later reported in the ERS Spectrum in the summer 1992 issue under the title of "Helping Teachers Motivate Students: Five Case Studies". Although all of the authors made contributions to this paper, the senior author assumes responsibility for the conclusions presented and any errors created in preparing this paper from the reports of the other authors.

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"
HELPING TEACHERS MOTIVATE STUDENTS:
SIXTEEN CASE STUDIES

The Model

The model used for each of these studies is based on a set of "common sense" assumptions:

One - Teachers are more likely to consider changing their teaching practices when they are uncomfortable with their current practices.

Two - Teachers are more likely to be uncomfortable with their current teaching practices when evidence exists that current practices are not producing desired results.

Three - Evidence of inadequate levels of student motivation is more likely to be accepted as valid by teachers when the evidence is generated by students and presented in numerical form.

Four - Teachers are more likely to accept alternative teaching practices if they helped generate the alternatives.

Each of the case studies reported in this paper is unique. Each was designed to improve local situations within local constraints. However, each also was conducted in ways consistent with the preceding assumptions and followed the same general procedural model:

1. Student motivation was assessed using the Student Motivation Diagnostic Questionnaire (Matthews & Brown, 1988).

2. The results of the questionnaire administrations were
presented to the teachers selected for participation in the case studies.

3. The administrators or supervisors who conducted the studies worked with the selected teachers to generate alternative ways of behaving.

The reports of the case studies are organized into three sections: The Original Seven Studies, Nine Additional Case Studies, and Studies in Process. The studies reported in the section titled The Original Seven Studies includes those reported in 1992, and where possible, includes updates. The Nine Additional Case Studies include those where posttest data are available for studies initiated during the 1992 - 1993 school year. The last section includes reports of the studies initiated during the 1992 - 1993 school year for which no posttest data have been collected.

The Original Seven Studies

Case One

A second year English teacher was chosen based on the negative teacher-student rapport experienced during her first year of teaching. Students complained of her indifference to them personally and of her accusing and nagging remarks in her efforts to redirect student behavior. Much instructional/learning time was spent in arguing with students and, often, students would be sent from class for disciplinary action. Students expressed that they did not like the class and that they felt the teacher did not care if they learned. The teacher
complained that she did not receive the respect due a teacher and was determined to run a tightly structured class. She was a well-planned, innovative, and energetic English teacher but seemed totally frustrated that not much English was being taught. These same characteristics appeared during the first two to three weeks of her second year of teaching. Her interactions with students were becoming less and less effective. She dreaded meeting certain classes.

This teacher appeared almost relieved to be approached to work on ways to motivate students to learn. She readily accepted that there must be different strategies she could use to more positively influence learning. After the Student Motivation Diagnostic Questionnaire was administered to this teacher's eighth grade English class of 25 students, the results clearly reflected the students' negative attitude toward her. She was open to changing her behavior to get students to change their behavior and attitudes.
Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>85</td>
<td>3*</td>
<td>99</td>
</tr>
<tr>
<td>MATH</td>
<td>92</td>
<td>96</td>
<td>99</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>96</td>
<td>89</td>
<td>72</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>82</td>
<td>96</td>
<td>75</td>
</tr>
</tbody>
</table>

* = target variable

When compared to math, science, social studies, and other English teachers, a mean score of 3.13 in the "Attitude Toward Teacher" category placed this teacher in the third percentile. This category became the target variable.

During a collaborative conference to discuss strategies to improve student motivation, the teacher decided to work toward improved student-teacher relationships. She decided she did not have to "play teacher." She projected herself as a vulnerable individual by admitting to her mistakes and laughing at herself when she became side-tracked or confused. She began to interact with these students outside of class with casual conversations as she met them in the hallways, cafeteria, etc. She attended student extra-curricular activities. She invited parent interaction and found that partnership to be very effective in creating a more positive attitude toward her. Threats, raised
voice, and negative reprimands were replaced with suggestions and questions. The students began to see her as a person interested in them and their success.

This teacher continued to be organized in her planning and varied in her teaching methods and strategies. Students began to enjoy her enthusiasm about English studies and her interest in them. They began to get to class on time with their materials and the distractions and arguments decreased significantly. The teacher has gradually introduced cooperative learning strategies and began allowing students to make decisions such as whether to work in pairs or independently, when to watch a film, what format of quiz to have. When correction or redirection became necessary, she used positive paraphrasing and supporting statements rather than accusing and threatening statements.

After 12 weeks of implementing these strategies to improve the student-teacher relationship, the teacher and students agreed that a more positive and meaningful classroom atmosphere has developed. The students even look to this teacher now as a source of support outside the English class. The teacher is so pleased with the results that she now considers this class her favorite class and is implementing the strategies in all of her classes.

Case Two

The teacher selected for this study was a 29-year veteran who teaches civics to ninth-grade students. After teaching for several years at another school, she was transferred to the large
high school in which this study took place. Prior to the school year beginning, the teacher expressed concern over inadequate student motivation. She also indicated she felt frustrated and ineffective when trying to deal with inadequate student motivation. Based on these facts, this teacher was chosen to participate in this case study.

The teacher’s reactions to being chosen to participate was positive. She immediately accepted ownership of the problem. A partnership with an assistant principal (the researcher for this case study) was established to generate and implement a solution to the problem.

The Student Motivation Diagnostic Questionnaire was administered to one ninth-grade civics class to determine which aspect of student motivation needed the greatest improvement. The following pretest results indicated the target variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT OF ABILITY</td>
<td>20*</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>68</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>31</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>38</td>
</tr>
</tbody>
</table>

* = target variable

At this school, teachers met to improve a specific aspect of student motivation and developed intervention strategies as part of a dissertational study. The means used to develop the
intervention strategy was an in-service staff development program led by the author of this case study. The main objective of the program was to generate activities considered by the teachers to promote higher levels of student motivation. The teacher chosen for this case study actively participated in the staff development program and helped generate the teacher activities determined to promote student self concept of academic ability. During the remainder of the semester, the following activities were implemented by the teacher in the assessed civics class.

1. Use verbal and non-verbal reinforcers, praise, smiles, touch, attention, and proximity immediately after a positive instructional or social behavior.

2. Reward student strengths publicly and strengthen their weak spots privately.

3. Give specific praise for what you can find right and successful in a student's work.

4. Ask questions that match a student's ability level.

A posttest was administered to determine if, in fact, student self concept of academic ability had been altered. The following post test results were recorded.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT OF ABILITY</td>
<td>72*</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>72</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>38</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>68</td>
</tr>
</tbody>
</table>

* = target variable

Posttest percentile scores indicated an improvement for all variables of student motivation. Self concept of academic ability (the target variable) and attitude toward teacher showed a substantial improvement. The teacher was interviewed and asked to describe what she observed about herself and her students during the implementation stage. During this period, the teacher reported that she believed her students' grades and behavior had improved. She also indicated that this class had become her favorite. Did student motivation improve? Supported by posttest scores and the teacher's personal observation, the answer is yes.

Case Three

A second year teacher volunteered to participate in this case study because he felt a need for improvement in the area of student motivation. He is certified to teach both Latin and language arts, but only teaches one section of language arts. Consequently, most of his efforts were directed towards Latin and he felt that he was teaching language arts "by the seat of his
pants." His attitude toward this study was excellent because he volunteered and because he had already acknowledged that he "owned" the problem which he described as a need for more structure.

The Student Motivation Diagnostic Questionnaire was initially administered in the Fall with the following results in English:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT</td>
<td>38</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>27*</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>31</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>99</td>
</tr>
</tbody>
</table>

* = target variable

These results indicate that the students liked the teacher very much, but did not think he expected very much of them. He was both surprised and disappointed by these results and set a goal of redirecting enthusiasm from the teacher to the subject.

Working with an assistant principal, (the researcher for this case study) strategies were developed to achieve the goal. The initial strategies were to begin using story telling, journals, and a calendar. The calendar would be a long-term hand-out including homework assignments, due dates for quizzes, tests, progress reports, papers, peer editing, and a set of expectations. The teacher also noted that students seemed
motivated by two different things: grades and relevancy. He began to utilize more open-ended discussions using current news and relating literature to the students' lives.

The teacher and assistant principal also agreed upon using an objective on the board each day to create a focus which could then be referred back to at the end of the period in order to bring closure. A seating chart was created to bring about more order and discipline.

A daily grade procedure was implemented which included homework, quizzes, discussions, and participation. Each student began each day with a grade of 80. If a class contribution was made, the score went up; if not, the score went down. (Poor behavior could also result in disciplinary measures being taken.) Every student was given an opportunity to participate every day. If no other avenue was available, students were allowed to write a brief summary or response to class and turn it in at the end of the period. Students initially perceived this system as a punishment but their attitudes changed once they received a "reward." Credit was not given for "right" or "wrong" answers but for the ability to support answers with specific examples.

The unit on Julius Caesar became the first unit in which a calendar was used. The teacher also used the "novel" approach of showing the movie first and then reading the play. This helped with the understanding of the Elizabethan language and plot. Following is a list of student grades at the end of the 12 week period (prior to the Julius Caesar unit) and a list of their
grades at the end of the unit. There were 26 students. Grades went down for five students, up for 17 students, and showed no change for four students.

<table>
<thead>
<tr>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>61</td>
<td>74</td>
<td>76</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>91</td>
<td>91</td>
<td>87</td>
<td>88</td>
<td>75</td>
<td>79</td>
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<tr>
<td>70</td>
<td>70</td>
<td>74</td>
<td>79</td>
<td>85</td>
<td>84</td>
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<td>66</td>
<td>69</td>
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<td>70</td>
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<td>60</td>
<td>58</td>
<td>67</td>
<td>74</td>
<td>60</td>
<td>62</td>
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<tr>
<td>83</td>
<td>84</td>
<td>70</td>
<td>77</td>
<td>93</td>
<td>92</td>
</tr>
<tr>
<td>80</td>
<td>83</td>
<td>92</td>
<td>92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The questionnaire was administered again at the end of the Fall quarter and showed the following results in English:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT</td>
<td>03</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>58*</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>17</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>79</td>
</tr>
</tbody>
</table>

* = target variable

The target area (Teacher Expectations and Values) did increase from the 27th percentile to the 58th percentile. The other three areas all showed a decrease. This was expected in
the category "Attitude Toward Teacher." Item 41 (How good are you at getting high grades in English?) was the item in the category "Self concept of Ability" which showed a decrease. This may have been influenced by the over-all low class grades at the end of the 12 weeks (Pre column above). The decrease in the area "Future Utility" may be due to the last unit of study. Julius Caesar may not seem relevant to high school sophomores.

The teacher observed the following changes in his students: a) Greater participation occurred as students began to speak up in class and a foreign language speaking student began to write more frequently; b) Assignments were completed with more frequency and consistency; and c) Motivation to improve grades occurred.

The teacher made the following observations about himself: a) He has become more aware of the importance of expectations (making his expectations known to the students and setting a purpose); b) He now knows he can get organized and establish a calendar; c) He realizes that this knowledge alone does not change his habits, rather only points out the need and the method. This teacher has been recognized by the administration as doing a good job in general. There have been problems with procrastination and following through on paperwork. It appears that his analysis of the situation is accurate.

This researcher is not confident that the teacher will make significant changes in his behavior despite his desire and
knowledge unless continued support from the assistant principal is given.

Case Four

A pilot study was conducted during the first half of the school year at the school where the researcher serves as principal and is completing a dissertation on student motivation. A biology class of 25 first-time 10th graders was used for the study. The main reason this class was chosen was because these above average students were not achieving in science at expected levels nor responding positively to their teacher's instructions.

The Student Motivation Diagnostic Questionnaire was given to all students of the biology class during the fourth week of school. The following table illustrates these pretest data.

Pilot Study Pretest Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td>10</td>
<td>3</td>
<td>58</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>3*</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>SOCIAL STUDES</td>
<td>100</td>
<td>38</td>
<td>3</td>
</tr>
</tbody>
</table>

* = target variable

The researcher and the science teacher saw that the lowest group percentile scores in science were for teacher expectations.
and attitude toward the teacher as both scored at the third percentile. Teacher expectations was chosen for the pilot study as it is deemed to have the greatest impact on the effort students exert to achieve (Matthews & Holmes, 1983, p. 108). The researcher and science teacher worked together to develop strategies to raise students beliefs about their teacher’s expectations in science.

The teacher met with the researcher after the sixth week of school. At this point, students were achieving at an even lower level, and they would not respond positively to the teacher’s expectations. The students continued to complain about the class and the teacher. The researcher agreed to meet with the students and to act as a mediator. He listened to the students’ concerns and then asked the students to identify strategies for the students to give to the teacher in exchange for the teacher being more sensitive to the students’ wants.

The teacher reported that there was a dramatic improvement in the students’ behaviors and academic achievements. The students actually did what they agreed to do in exchange for teacher reception to student wants. The strategies had helped to stimulate change in student attitudes and to motivate students. The posttest given after the 17th week of school showed that student beliefs about teacher expectations went from a pretest score at the 3rd percentile to a post test score at the 20th percentile. This proved to be a statistically significant difference.
Pilot Study Posttest Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>43</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>MATH</td>
<td>3</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>20*</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>96</td>
<td>96</td>
<td>20</td>
</tr>
</tbody>
</table>

* = target variable

Case Five

The teacher included in this study was selected because of her recent reassignment from an elementary school to a middle school. This was a different environment with many varied challenges even for this veteran teacher. She has been teaching 33 years, the last 22 of which have been in the same system. She currently teaches science to sixth and seventh grade students.

The teacher reacted positively when asked to be a part of this study to determine the relationship between the teacher and students' motivation. She indicated she would always like to do anything she could to help her students. Her "ownership" of the problem came when the results of the questionnaire, which indicated her high level expectations as opposed to the students low self concepts of their abilities to achieve were presented to her. The percentile scores for science were as follows:
<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT OF ABILITY</td>
<td>5*</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>99</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>82</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>34</td>
</tr>
</tbody>
</table>

* = target variable

The teacher's task, based on this information, was to examine her own expectations in view of the abilities of her students and then to build their confidence to believe they could achieve. She indicated that she did sometimes believe that she expected too much from all of the students. However, she also felt this would help them to really want to learn more about science.

One strategy suggested by the researcher was that she give several smaller, easier tests that would guarantee higher scores. Another option was to look for other methods to allow students to express what they know in varied approaches, i.e., research, writing, drawing, verbalizing, etc.

At the middle grades level, the system contracted with a consultant to conduct an in-service staff development program with several teachers, including the teacher selected for this study. Hopefully, a more nurturing approach will evolve with a better understanding for students at this age. Several options for alternative student assessment procedures are also being
explored. An in-service program has been planned dealing with confidence and esteem building with middle school age students. Alternative assessment procedures are a big part of this approach.

The teacher who was the focus of this study has changed her attitude and has accepted responsibility for improving student motivation. She has become more open and is actively seeking alternative ways of behaving so that she can have a more positive impact on student motivation and achievement.

Case Six

The teacher selected for this case study was in her second year of teaching. Her area of specialization was mathematics, but she was assigned two science classes to teach in addition to her mathematics classes. The primary reason this teacher was selected was that she was having trouble managing her classroom and frequently sent students to the principal’s office for disciplinary action.

The teacher’s initial reaction to being selected showed her basic insecurity. She was somewhat nervous and frightened. She was aware that she was losing control of her students and was not confident of her ability to teach science. The results of the administration of the Student Motivation Diagnostic Questionnaire are shown in the following table.
Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>99</td>
<td>51</td>
<td>77</td>
</tr>
<tr>
<td>MATH</td>
<td>38</td>
<td>55</td>
<td>94</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>38</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>SOCIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDIES</td>
<td>46</td>
<td>41</td>
<td>31</td>
</tr>
</tbody>
</table>

* = target variable

When shown the results, the teacher was quite open to "owning" the problem because she was unhappy with her teaching assignments in science and did not like teaching "out of field". She admitted she needed help and was frustrated by her inability to deal effectively with the problem.

The target variable selected was student self-concept of ability in science. This variable was an obvious choice in that it was at least 17 percentile points lower than the other aspects of student motivation in science.

The researcher believed that the low self-concept of the teacher in the area of science was affecting her behavior in class and contributing to the students' low self-concepts of ability in science. The strategy selected focused on improving the teacher's ability to maintain control of students and to effectively teach the subject matter. The teacher agreed that
this focus was appropriate and willingly participated in the activities and experiences provided.

The teacher visited the classrooms of more experienced and effective science teachers and observed their techniques of classroom management and methods of presenting information to the students. The more experienced teachers had individual conferences with the teacher and advised her on ways of dealing with classroom management and instruction. The researcher for this case study, as assistant principal for discipline, met regularly with the teacher and provided her with ideas for better classroom management. Other school administrators also provided encouragement and support.

A written plan for improvement was presented to the teacher in the form of a suggested plan for improvement. Among the suggestions included in the plan were the following:

1. Increase frequency of tests to give students more frequent feedback.


3. Make A’s difficult to get, but make F’s even harder to get.

4. Teach more of what you know and spend less time trying to teach those things you don’t know unless your weaknesses are in areas that are essential for future learning.

5. Read and try some of the activities suggested in the book: 100 Ways to Enhance Self-Concepts in the Classroom.
6. Let students study together. Let them pick their own partners, but structure this so that a brighter student will be paired with a slower student.

7. Remember that your job is to facilitate learning, not just to dispense information.

8. Don’t expect to be perfect.

9. Try to relax more in the classroom.

10. Observe one of the more effective teachers at least once a week until the end of the school year.

By the end of the school year, student behavior in this teacher’s classroom had improved. There were fewer referrals to the office for discipline and the teacher had more confidence in her ability to handle the disciplinary problems that did occur. She was also more willing to discuss her management problems with other teachers and to ask for help.

Student achievement improved modestly, overall, as the teacher gained better control of her class and was able to concentrate more of her effort on the subject matter. In this case, it appears that the students’ self-concepts of ability were directly linked to the teacher’s self-concept of ability in science.

Case Seven

The ineffectiveness of the teacher selected for this study became a concern due to the following indicators: (1) A disproportionate number of disciplinary referrals from a particular class were sent to the administrator; (2) A
disproportionate failure rate in previous semesters had been recorded; (3) A number of conferences with parents and/or students revealed some negative teacher-student relationships; and (4) In an informal conversation, the teacher requested assistance with a particular class.

The teacher has 15 years teaching experience in public schools. Six years of this time has been at the present school. Prior formal teacher evaluations and current classroom observations revealed that the teacher is knowledgeable about math content and is skillful in methods of presentation of the content area.

When the teacher was asked to participate in the project, she seemed pleased that someone was interested in her difficulties with this particular class. She reacted with the statement, "I can use all the help I can get with this group."

The teacher has not, as yet, accepted ownership of the problem. Partly because the percentile scores for English were similar to the scores for math, the teacher has rationalized that the students are obviously the major part of the problem. The administrator (the researcher for this study), attempting to maintain an amiable, working relationship with the teacher, has communicated in more subtle terms in hope that the teacher will come to some realizations on her own.
Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>10</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>MATH</td>
<td>7</td>
<td>3*</td>
<td>24</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>41</td>
<td>55</td>
<td>41</td>
</tr>
<tr>
<td>SOCIAL STORIES</td>
<td>57</td>
<td>82</td>
<td>61</td>
</tr>
</tbody>
</table>

* = target variable

The lowest motivational deficiencies of the group of students who were administered the questionnaire were identified as "Attitude Toward Teacher" and "Self Concept of Ability". Both of these scores were at the third percentile. Strategies were developed for the target variable of "Self Concept of Ability". Since the available research, as well as experiences as educators, confirms that successes and failures in life's endeavors are directly related to one's perceptions and attitudes about one's competence, the logical starting point for improving the target group's academic progress was the improvement of individual self-concepts.

The strategy to improve student motivation in the target area of Self Concept of Ability included the following steps:

1. A Special Education teacher was assigned to "team" with the target teacher. Since seven of the thirty-five students were
special education students, there was justification for arranging the schedule of the Special Education teacher for the purpose of giving these students extra help.

2. The Special Education teacher worked in the classroom daily to reinforce to students the ideas that they were valuable, competent, and lovable.

3. Time at the end of each class period was used for "sponge" activities that provided opportunities for positive feedback.

4. The administrator found opportunities to interact with these students in a positive, nonthreatening situation.

5. Opportunities for observing teachers who are consistently successful with the same group of students were provided to the math teacher (i.e., Social Studies teachers of the target group scored in the 72nd percentile in the area of Self Concept of Ability.)

The teacher's attitude toward the students seemed to be less severe than in the past. On-task behavior in the classroom tended to be more the norm; however, this could be a direct result of having another teacher in the classroom. Disciplinary referrals for the target group in this particular classroom setting have dropped to "zero." Additionally, the number of discipline referrals for the target group have dropped dramatically in all of the other classes.

While assessment grades have not increased significantly, with fewer class disruptions and more on-task behavior, there is
the expectation that grades will improve with time. Since there are school data which suggest that all of the ninth graders are experiencing some difficulties in all four of the target areas, the Student Motivation Diagnostic Questionnaire is going to be used with all ninth graders. Programs based on the data will be developed and implemented.

Nine Additional Studies

Case Eight

The teacher in this case study was chosen because of her strong desire to be an exemplary teacher. She has taught for three years, but two of those years were more than ten years ago. Teaching methods have changed dramatically since her initial experience, and this factor alone has created additional stress. Her current teaching assignment is sixth grade English and mathematics.

After being asked to participate in this study, the teacher was genuinely grateful for the additional help that this type of study could offer. Pinpointing the problem would help her know where to put her efforts to improve student motivation.

The pretest results showed two aspects of motivation that were in need of significant improvement. These two areas were teacher's expectations and future utility in English. The teacher's initial reaction was that of denial and blame, i.e. she did expect a lot from her students, usually made the assignments relevant, but Whole Language was too loose in the areas of pacing and student choice. However, by the end of the conference with
the researcher (an assistant principal) the teacher had identified strategies she believed would improve student motivation in the target areas.

An initial strategy selected for improving students' beliefs about the future utility of English was to use a thematic approach to the study of literature. The teacher and students now identify values and decisions of fictitious characters and discuss association of lives of these characters and their own values and decisions.

In the English class, student choice is still an option in the area of reading. However, the teacher has introduced research showing how vocabulary is naturally built through reading for pleasure. The natural building of vocabulary is then used in their writing and daily oral communication with others.

In the area of writing (grammar, spelling, etc.) the teacher has used an open discussion format to help students understand the importance of this skill. Discussions focus on first impressions formed through communicating in written form, how an individual is perceived through their ability to spell and write in complete sentences, the need for this skill in life and the students' future ability to function in post-secondary educational endeavors.

In her efforts to improve students' beliefs about her expectations for quality performance, the teacher has used the overhead extensively to show examples of acceptable work urging students to do more that the minimum expected. Sequential
process of writing has been stressed along with a verbal dialogue of "thinking through" the writing process. Again the overhead has been used to visually show students the steps in good writing, but this is always coupled with verbal dialogue.

As the following table shows, slight improvement in both target variables has occurred. Students are asking to go beyond the expected. Not all students are motivated to excel, but a greater number are requesting help and showing an interest in improving. The teacher has improved in self confidence and is enthusiastic about sharing her teaching ideas and practices. Current plans are to continue working with this teacher for the remainder of the school year and to continue to focus on the same two target variables.

Pretest and Posttest
Mean and (Percentile) Scores

<table>
<thead>
<tr>
<th>Teacher Expectations*</th>
<th>Future Toward Teacher</th>
<th>Utility* Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>3.87 (10)</td>
<td>4.16 (92)</td>
</tr>
<tr>
<td>Posttest</td>
<td>3.97 (10)</td>
<td>4.11 (82)</td>
</tr>
</tbody>
</table>

* = target variables

Case Nine

This dissertation study (Hulvey, 1992) was conducted during the second semester of the 1991-92 school term at the junior high school where the writer serves as school psychologist. The school's eighth grade class was chosen for study because of
frequent comments by teachers suggesting that their students were particularly "unmotivated." The eighth grade class from the junior high school of a neighboring county served as a control group.

During the first week of the second semester, an in-service training program was held for eighth grade teachers in the treatment group. Teachers in the control group received no special training.

During the initial training program, teachers were presented an overview of motivation theory, a rationale for trying to raise motivational levels of students, and an overview of the student motivation model of Matthews (1979). Teachers were then asked to "brainstorm" and to think of as many classroom strategies as they could to increase student motivation.

The Student Motivation Diagnostic Questionnaire (SMDQ) was administered at the beginning of the second week of the second semester to both the treatment and the control groups. The area having the lowest mean percentile rank, self-concept of academic ability, was targeted for improvement. The following table shows the pretest data.
Mean Pretest Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>43</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td>MATH</td>
<td>34</td>
<td>51</td>
<td>79</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>68</td>
<td>75</td>
<td>67</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>38</td>
<td>34</td>
<td>48</td>
</tr>
</tbody>
</table>

PERCENTILE MEANS

|               | 45.75       | 53.75       | 59.5         | 39.75*       |

* = target variable

During week three of the second semester, two training sessions were held. During the first session, teachers were provided with a review of the student motivation model of Matthews (1979). During session two, teachers were asked to select those strategies derived through brainstorming most likely to improve student self-concept of academic ability without negatively affecting another aspects of student motivation.

Twenty strategies were selected. Most of the strategies involved reinforcement strategies, grading practices, or individualizing instruction.

Teachers were asked to utilize one or more of the selected strategies in their classrooms daily. A twenty-item checklist based on the selected strategies was developed for purposes of
monitoring their compliance. This checklist was collected on a weekly basis.

From week four through week 17, classroom strategies were implemented. Additionally, bi-weekly meetings were held with small groups of four to five teachers to discuss progress made, problems encountered, and to offer suggestions and support.

During week 17, both the control and treatment groups were posttested with the SMDQ. The following table illustrates posttest data:

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>27</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td>MATH</td>
<td>34</td>
<td>55</td>
<td>72</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>55</td>
<td>79</td>
<td>72</td>
</tr>
<tr>
<td>SOCIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDIES</td>
<td>38</td>
<td>55</td>
<td>61</td>
</tr>
</tbody>
</table>

PERCENTILE MEANS

<table>
<thead>
<tr>
<th>PERCENTILE MEANS</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>38.5</td>
<td>48</td>
<td>60.75</td>
<td>74.75*</td>
</tr>
</tbody>
</table>

* = target variable

Mean posttest percentile scores indicated a substantial improvement in the target variable, self-concept of academic ability. However, slight decreases were noted in the areas of teacher expectations and attitude toward teacher.
Statistical and descriptive data indicated that there was a significant difference between scores for students at the treatment school where teachers participated in a staff development program designed to improve student self-concept of ability and the control school where teachers did not participate in a similar program. This difference was in favor of the treatment school.

Success in improving self-concept of academic ability in this study may be related to several factors. Probably the most important of these factors was the emphasis of teacher-designed strategies on grading practices. Other factors that may have contributed to the success in improving self-concept of academic ability were the support for the project by the school's principal and counselor and the willingness of the teachers to implement the strategies they developed.

Case Ten

The students selected for this study were those students assigned for the first time to a tenth grade homeroom and enrolled exclusively in tenth grade academic courses (Melnick, 1992). Scores on the Test of Academic Proficiency (TAP), which depicts academic performance of this tenth grade glass, ranged from 113 to 232. The standard mean score was 106.65. Prior to this study student motivation had not been measured.

The participants for this study were limited to tenth grade academic teachers assigned to the above tenth grade students. Academic areas corresponded to the academic areas found in the
Student Motivation Diagnostic Questionnaire. Years of teaching experience varied from recently hired teachers to teachers who were looking forward to retirement. These teachers were chosen based on the fact that they taught the selected student population. Reaction to being chosen as participants for this study was mixed. Most teachers reacted positively while a small minority were reluctant to participate.

The Student Motivation Diagnostic Questionnaire was administered to determine which aspect of student motivation needed the most improvement. Based on the following pretest results, self-concept of ability was selected as the target variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT OF ABILITY</td>
<td>26.5*</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>31.5</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>39.5</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>40.75</td>
</tr>
</tbody>
</table>

* = target variable

The reaction of the teachers was one of concern. However, as teachers entered into a partnership to develop strategies to improve the target variable, they enthusiastically accepted ownership of the problem.

At this school, the administrator conducting the study led a staff development program to help teachers develop intervention
strategies to improve a specific aspect of student motivation. The administrator was an assistant principal. The main objective of the program was to generate activities considered by the teachers to promote higher levels of student motivation. Teachers chosen for this study actively participated in the staff development and helped generate the teacher activities designed to improve students' self-concepts of academic ability.

During the remainder of the semester, the teachers implemented the following activities in the academic classes of English, mathematics, Science, and social studies.

1. Use verbal and non-verbal reinforcers, praise, smiles, touch, attention, and proximity immediately after a positive instructional or social behavior.

2. Reward student strengths publicly and strengthen their weak spots privately.

3. Give specific praise for successful parts of a student's work.

4. Ask questions that match a student's ability level.

Three methods were used to monitor the implementation of activities: (1) Peer-evaluation, whereby each teacher was assigned a partner in order to observe and document that activities were implemented, (2) self-evaluation, that required each teacher to document on a weekly checklist the implementation of specific activities, and (3) administrator verification, in which the teacher and administrator held progress conferences to validate that activities were implemented.
A posttest was administered to determine whether these strategies had altered student self-concept of ability. The results were:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentile Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF CONCEPT OF ABILITY</td>
<td>20.75*</td>
</tr>
<tr>
<td>TEACHER EXPECTATIONS</td>
<td>19</td>
</tr>
<tr>
<td>FUTURE UTILITY</td>
<td>27</td>
</tr>
<tr>
<td>ATTITUDE TOWARD TEACHER</td>
<td>23.25</td>
</tr>
</tbody>
</table>

* = target variable

Posttest percentile scores indicated all aspects of student motivation declined. A failure to obtain an improvement in student motivation may have been due to several factors. One factor examined included an evaluation of Student Concept of Ability questions found in the Student Motivation Diagnostic Questionnaire. The examination revealed that students believed they could learn (intrinsically influenced) but did not get good grades (extrinsically influenced). Teachers may need to evaluate their grading practices to promote positive student self-concept of ability. Another factor was time. The length of the study was minimal for any positive changes to take place. One semester may not be long enough to reflect any positive changes in student motivation. A final factor to be considered is the leadership role of the administrator. If the position lacks sufficient power, then significant positive changes in student self-concept
of ability may not occur. If this study should be replicated, the above factors need to be improved.

**Case Eleven**

A dissertational study was conducted during the first half of the school year at the school where the researcher served as principal (Franks, 1992). The population consisted of first-time 10th grade students and their English, math, science, and social studies teachers in two high schools in contiguous counties. The focal point was an in-service training program conducted by the principal for all teachers and assistant principals in the experimental group. The in-service program emphasized future utility (the extent students believe what they earn in school will benefit them) as the target variable.

Using the Student Motivation Diagnostic Questionnaire (Matthews & Brown, 1988), the pretest assessment of student motivation took place at the beginning of the third week of the 1992-92 school year. At the beginning of the 18th week of school, students were given a posttest.

In this study, teachers needing to improve a specific aspect of student motivation designed and implemented an intervention strategy. This intervention strategy focused on prescribed activities designed by the teachers to promote a higher level of student motivation. These strategies began the fourth week of school.

The administrators involved in the study visited the participating teachers' classrooms once per week to observe,
support, and document that specific teacher activities were being implemented. In addition, each teacher kept a self-evaluation checklist documenting the implementation of specific teacher activities. Checklists were given weekly to the researcher by the administrators and teachers.

The staff development group listed, in order of priority, strategies and ideas pertinent to improving future utility. A checklist was developed to assist faculty and administration in the design of the intervention strategy. A brief written description of the activity was included on the back of the check sheet.

The group suggested that more educators need to address the motivational aspect of future utility because many business leaders believe that educators do not teach those concepts that will be useful later on in life. They had not realized the importance of students believing in the future utility of what they were attempting to teach.

The data used in this study were analyzed using Analysis of Covariance. This technique adjusts posttest scores to compensate for pretest differences between groups. The adjusted mean raw scores summed across disciplines for Future Utility for the treatment group were significantly higher, at the .001 level, than they were for the control group. The following table shows the differences between the treatment school’s adjusted pretest and posttest scores Future Utility percentile for each of the four academic disciplines.
Percentile Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>65</td>
<td>68</td>
</tr>
<tr>
<td>MATH</td>
<td>40</td>
<td>51</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>31</td>
<td>61</td>
</tr>
</tbody>
</table>

Means: 44.25, 56.0

Case Twelve

Approximately 200 Grade Five students participated in this study. Of these students, 65% were white, 25% were black, and 10% of the students were from other countries. The socio-economic background of the students varied from those dwelling in lower-class apartment complexes to students living in single-family homes estimated as high as $300,000. Approximately 9% of the students participated in the free or reduced lunch program. Attendance at school for this group of students averaged 95.95. Intellectually, students performed above average on the Test of Cognitive Abilities with the most recent average score calculated at 111.

One of the major goals for this school was to identify, become knowledgeable of, and implement strategies to improve the academic success of students at risk. When sharing characteristics of students experiencing problems in the classroom, teachers consistently described these students as
lacking the motivation to learn. For this reason, it seemed appropriate to concentrate on learning more about motivation and developing strategies to enhance student motivation.

Nine fifth-grade teachers participated in the study. Only two of the nine teachers were considered first-year teachers. Three of the teachers had 5-10 years of experience with the remaining four teachers having taught for more than 10 years. Classrooms were primarily self-contained with teachers responsible for all major disciplines. Two of the nine teachers worked together consistently, and therefore, worked with students in both classes.

With the exception of one teacher, this group of educators would be considered above average in the successful implementation of effective teaching practices. Professionally, these teachers were respected by their colleagues, students, and parents of the school community.

This group of teachers was selected for this study primarily because they worked with one of the two age groups recommended at the elementary level as being appropriate for using the Student Motivation Diagnostic Questionnaire. When approached about participating in this study, all nine teachers were enthusiastic and willing to commit their time and effort.

The pretest data is presented in the following table. Pretest mean scores and percentiles indicated that the lowest scores were in Teacher Expectations and values for both English and science. Since future utility scores were also low in both
English and science, the decision was made to target both variables.

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGLISH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14*</td>
<td>82</td>
<td>58*</td>
<td>81</td>
</tr>
<tr>
<td><strong>MATH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>89</td>
<td>94</td>
<td>99</td>
</tr>
<tr>
<td><strong>SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38*</td>
<td>79</td>
<td>67*</td>
<td>99</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>79</td>
<td>84</td>
<td>58</td>
</tr>
</tbody>
</table>

* = target variables

Teachers were surprised that the pretest results indicated low scores in English, but expected science to show a need for improvement. Upon beginning the staff development sessions, one of the questions asked teachers was the subject they most disliked to teach. Science was the most common answer given.

Strategies used to improve the two targeted aspects of student motivation, Teacher Expectations and values and Future Utility of schooling in English and science, included the following:

1. Teachers allocating more time to the subjects of science and English including frequent homework assignments in both areas.
2. Teachers conveying positive expectations about students' success in English and science.

3. Teachers displaying enthusiasm for both English and science by planning and implementing more interesting activities such as long-term projects.

4. Teachers conveying the importance of each lesson taught in both English and science to the future of the society and the world in which these students would participate.

To monitor the implementation of these strategies, teachers turned in logs at each session which described their activities. In addition, all nine teachers were observed and evaluated by the principal using the Georgia Teacher Observation Instrument for providing specific feedback. Lessons observed were required to be in the areas of English and science.

The following table indicates that there was an improvement for most of the student motivation variables. Substantial gains are shown in the target variables of Teacher Expectations and Future Utility in English and science. Teachers involved in the intervention program reported they were more aware of the importance of conveying positive teacher expectations and the future utility of science and math. They felt the extra time placed on science had made them feel more favorable toward the discipline.
### Percentile Scores

<table>
<thead>
<tr>
<th></th>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>65*</td>
<td>82</td>
<td>99*</td>
<td>99</td>
</tr>
<tr>
<td>MATH</td>
<td>92</td>
<td>89</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>55*</td>
<td>89</td>
<td>96*</td>
<td>99</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>82</td>
<td>72</td>
<td>99</td>
<td>96</td>
</tr>
</tbody>
</table>

* = target variable

### Cases Thirteen to Sixteen

The 107 students participating in this study are ninth graders coming from three different middle schools. These students, 70% of whom are white, 25% are black, and 4% are of another ethnic origin, have socio-economic backgrounds ranging from families housed in $250,000 homes to those living in government-subsidized housing. The Iowa Test of Basic Skills indicates that the students read and have math skills ranging from grade equivalents of 11.2 to 5.2, scores that are second only to those of the ninth-grade gifted students in this school. On the basis of these scores and on that of recommendations of their teachers, these students were selected to joining the Interdisciplinary Team, a pilot program for advanced to average ninth-grade students.
The teachers for this Interdisciplinary Team were chosen on the basis of their teaching skills, their flexibility, and their ability and willingness to try innovative teaching methods. The researcher in this study is the team leader and English teacher.

The Interdisciplinary Team operates on the concept that students will go to four core classes: English, World History, Biology, and Algebra, Pre-Algebra, or Geometry. The classes are blocked during the first four hours of the school day so that team teachers may use flexible hour blocking to meet the needs of the students. Parents are actively involved in this process, serving as lab aides, chaperons, and tutors. Since parents are involved in the educational process, conferences are positive in nature, focusing on pro-active means to enhance student success rather than pointing a finger at student failure. While only the team leader has a second planning period, team teachers meet weekly during their common planning period to discuss individual student problems and to develop thematic units that will call upon the students’ use of all four disciplines.

Prior to the first day of school, the team teachers met to set goals and discuss methods for implementing those goals. At that time, all four teachers expressed interest in becoming involved in this study. Each teacher indicated that she wanted to improve her classroom skills and saw this study as a way to pinpoint areas in which to concentrate.
The students were administered the Student Motivation Diagnostic Questionnaire in early September and again in early December. They will be administered the questionnaire one last time in late Spring.

Case Thirteen

The English teacher in this case has 21 years of classroom experience working with students, in both public and private schools in grades six through twelve and with college freshmen. She holds teaching certificates in three states, has a masters degree in English education, a leadership certificate, and is presently a graduate student in educational leadership. She has a history of choosing innovative teaching methods and has, as a result, used such techniques as mini-electives, collaborative learning, individual learning, contracts, and an interdisciplinary approach. She is the team leader for the Interdisciplinary Team and thus had strong motivation for making her teaching the best it could be.

The results of the questionnaire for the teacher in Case Thirteen are shown below.

<table>
<thead>
<tr>
<th>Percentile Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Attitude</td>
</tr>
<tr>
<td>Future Self Expectations Toward Teacher Utility Concept</td>
</tr>
<tr>
<td>ENGLISH 61 75 44* 75</td>
</tr>
</tbody>
</table>

* = target variable
While being quite pleased with the overall pre-test results, the teacher was somewhat surprised that the students had difficulty seeing the future utility of English. She accepted immediate ownership in the problem, because, as team leader, she holds herself directly responsible for the success of the Interdisciplinary Team.

Thus, in reviewing her teaching methods it occurred to her that it was likely that while she told her ninth graders the immediate reason for learning a particular unit, she might have neglected to explain to them how the skills they learn in her classroom impact those needed in another. Recognizing that such a linkage was vital to an Interdisciplinary Team, she began to specifically state how each skill related to each unit in study in her students' other three classes. To be certain that she consistently did that, under the heading "How can I use this?" on the board, she began writing ways English skills could be used in math, biology, and social studies.

When the interim posttest was administered in December, the results indicated only a slight improvement.

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>65</td>
<td>65</td>
<td>48*</td>
</tr>
</tbody>
</table>

* = target variable
As a result, she intends to initiate each unit by asking students to generate ways in which the skills they learned in the preceding unit might be used in the future.

Case Fourteen

The math teacher in this case has three years teaching experience, all at this public school and most dealing with lower-level math classes and students in grades 10 and 11. She has just received her specialist degree in math education and has received excellent formal teaching evaluations. She was chosen to be a member of the Interdisciplinary Team in large part because of the flexibility and team skills she displayed in a previous innovative teaching situation which required her to teach content that was primarily out of her field. The teacher was enthusiastic and pleased with her inclusion on the team and with the students and their academic level. Her enthusiasm was reflected in the pre-test results which are shown below.

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Teacher</td>
<td>67</td>
<td>72</td>
</tr>
</tbody>
</table>

* = target variable

She, too, was pleased with the overall results of the pretest, and felt that it was understandable that students had generally low self-concepts of their math skills. Nonetheless,
she devised several means by which she planned to improve their self-concepts including alternative testing methods, tutoring, grading students on notebook completion, and using collaborative classroom learning.

During the ensuing three months between the pretest and posttest, the teacher, unfortunately, took none of the steps she indicated that she would, and tri-weekly student progress reports indicated that not only was student self-concept rapidly deteriorating, but student grades were plummeting. Students shared their growing frustration with their parents, who became quite vocal with their concern. The other team teachers were also feeling the impact of the problems that were evolving in math, and likewise expressed their concern and support in team meetings. The teacher became increasingly defensive, expressing absolutely no ownership of the problem, which she felt, stemmed primarily from lazy students.

The researcher, as team leader, and the assistant principal for instruction have tried several nondirective methods of support, but have been met with tears and denial.

The following interim posttest indicates the extent of the problem.
The math teacher's highest scores now are lower than her teammates lowest. Further, in a defense mode, she no longer sees this study as a means of improvement, but as a personal attack. The assistant principal has now asked that the teacher work with her to provide a specific written intervention strategy which, hopefully, will relieve the frustration of both the teacher and the students.

Case Fifteen

The science teacher has 20 years of experience in public schools in two states and has taught students in grades nine through twelve. She holds a masters degree in science education. She has a quiet and gentle manner which brings a steady consistency to her teaching, and is intuitive about the needs of her students. She, too, was most enthusiastic about improving her teaching and was eager to see the results of this study. The results of the questionnaire for the teacher in Case Fifteen are shown in the following table.
In consistency with her low-key manner, the science teacher was not dismayed with the results of the pretest. After looking at her target variable, she smiled and said, "The students hardly know me. At the end of three weeks, this variable will improve." Nonetheless, she indicated that she planned to move among the students more, talk with them in the hallways, write notes to them on papers that passed between them, and phone home about their academic progress.

She did just that, and, at the end of three months, the interim posttest showed the following improvement.

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIENCE 48</td>
<td>44*</td>
<td>72</td>
<td>81</td>
</tr>
</tbody>
</table>

* = target variable
The new variable did surprise the science teacher, for she really does not want her students to think that she expects a tremendous amount from them. To improve this variable, though, she does plan to encourage students to work with her in determining future expectations.

**Case Sixteen**

The social studies teacher has three years experience, all at this public school, teaching world history to students in grades nine through eleven. She holds a masters degree in social studies education. This teacher has a contagious enthusiasm for teaching and obviously enjoys being with her students. She worked with the English teacher last year successfully piloting a humanities class in a two-hour team-teaching block.

She was most enthusiastic about this study, and because she is most demanding and introspective about her teaching, was distressed about her results—results which pleased everyone else. The results of this teacher's pretest are stated below.

**Percentile Scores**

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL STUDIES</td>
<td>92</td>
<td>46</td>
<td>41*</td>
</tr>
</tbody>
</table>

* = target variable
Her target variable was really frustrating to her because she, herself, saw no real future utility for social studies other than to study it for the sheer love of history. It took a great deal of work with the team leader for her to generate methods to improve her students' concepts of the future utility of social studies. Finally, she began asking students to tell her why studying about the Romans, for example, would help them in another class, or in their future. Once the students saw that she really did want them to get more out of her class than an A, they readily adapted to her methods, and often walked into her class relating something they had done in English to social studies. She was delighted, and the interim posttest, tabled below, indicated the improvement.

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL STUDIES</td>
<td>89</td>
<td>65</td>
<td>61*</td>
</tr>
</tbody>
</table>

* = target variable

On the whole, team teachers felt that the study validated what they already believed to be their strengths and weaknesses in teaching, while the teacher whose scores fell should work through each variable. It is likely that she will work particularly on student self-concept in math, even though it is 51
not the lowest variable, for it is with this variable that she will get the greatest supervisory and team support. The three teachers whose scores improved feel comfortable in stretching just a bit more to see if they can improve in their target areas and see this study as an appropriate and accurate measure of their relationship with their students.

**Studies in Process**

**Cases Seventeen and Eighteen**

The students in these two studies were enrolled in the fifth grade in noncentral city urban setting. The elementary school houses students enrolled in grades K through 5 and students enrolled in eight self-contained special education classrooms. The two groups of fifth grade students were administered the *Student Motivation Diagnostic Questionnaire* at the end of the month of October.

The students in these two self-contained fifth grade classrooms come from diverse backgrounds. Students come from federally subsidized houses, apartments, subdivisions, as well as from subdivisions containing homes costing in excess of $500,000. About 75% of the students are Caucasians with the remaining being Blacks, Hispanics, Asians, and others. The majority of the parents are employed; however, in the more wealthy homes, the mothers are more likely to remain unemployed.

The two teachers selected were chosen at random from the four fifth grade teachers. All four of the teachers were considered by the researcher to be in need of help, but a
A decision was made to work only with two so that the students in the other two classrooms could serve as a control group. Both of the teachers selected have more than 15 years teaching experience. Both have received complaints from parents that could be classified as being unfair, too strict, and too uncaring. In addition, one of the teachers has been accused of showing favoritism by selecting just a few students with which to work closely throughout the year. Both teachers appeared to be excited about the prospects of having the questionnaire administered to their classes and getting the results.

The questionnaires were administered by the assistant principal with the teachers being absent from the settings. The assistant principal assured the students their responses would be kept anonymous.

The meaning of the term "true ability" was questioned by several of the students. The term was defined by the assistant principal as "It is what you think you are actually able to do; not what you actually do in your work or tests, but the best you think you can do". The students appeared to be reassured by this explanation. Several times, different students expressed concern that the teachers might find out what they wrote. They were again reassured that their individual responses would be kept anonymous.
Case Seventeen

The results of the questionnaire administration for the teacher in Case Seventeen are shown in the following table.

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>17*</td>
<td>74</td>
<td>38</td>
<td>89</td>
</tr>
<tr>
<td>MATH</td>
<td>51</td>
<td>72</td>
<td>72</td>
<td>87</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>96</td>
<td>89</td>
<td>99</td>
<td>58</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>31</td>
<td>65</td>
<td>65</td>
<td>38</td>
</tr>
</tbody>
</table>

* = target variable

Case Eighteen

The results of the questionnaire administration for the teacher in Case Eighteen are shown in the following table.
<table>
<thead>
<tr>
<th>Percentile Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Expectations</td>
</tr>
<tr>
<td>ENGLISH</td>
</tr>
<tr>
<td>MATH</td>
</tr>
<tr>
<td>SCIENCE</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
</tr>
</tbody>
</table>

* = target variable

The strategies generated for improving students' self-concepts of academic ability included the following:

1. Reward student strengths publicly and strengthen weaknesses in private.
2. Ask questions that match a student's ability level.
3. Admit your weaknesses (mistakes) and give students a laugh. Let your students know you are human.
4. Try cooperative learning techniques.
5. Start students with a fixed grade such as 80% and then add or subtract for participation, homework, etc.

The strategies generated to improve students' beliefs that teachers have high expectations included the following:

1. Give specific praise for successful parts of a student's work.
2. Allow students to make "guided" decisions.
3. Provide course outlines on a regular basis.
4. Break complex tasks into smaller units.
5. Reinforce constantly the more important course content.
6. Introduce short units when small amounts of time are available.

Plans are to follow-up with these teachers and to administer posttests after the Spring break in 1993.

**Cases Nineteen through Thirty**

The students involved with these case studies are enrolled in the ninth grade in the same high school. Each student is assigned to one of four teams that number between 90 and 100 students. The students come from socio-economic backgrounds that range from lower middle class to upper middle class. The teams are grouped heterogeneously, and therefore several academic levels are present within each team.

The ninth grade year is often a difficult period of transition for many students. In an effort to make ninth grade students more successful, several organizational strategies were implemented this year:

1. A team of teachers comprised of an English, science, mathematics, and electives teacher is assigned to one of four heterogeneous groups of students.
2. Each team of teachers meets daily during a common planning period to discuss their students.
3. A counselor meets with each team on a weekly basis to aid the teacher teams in their interventions with students.

4. Each team teacher has four classes, one team planning period, and one individual planning period so that ample time is provided during the school day to schedule parent conferences, student conferences, and plan lessons.

A general concern about generating and maintaining student motivation among the ninth grade students arose from the teachers involved with the program. To help students improve their academic performance, strategies were needed to improve student motivation.

The English, mathematics, and science teachers of each ninth grade team are participating in a year-long effort to improve a specifically targeted aspect of student motivation. Their years of teaching experience range from first year teacher to 26 years of experience. All of the teachers volunteered to be part of this program and agreed that a year-long effort to improve student motivation was an important component of the overall program.

The pretest data were collected at the end of the seventh week of the 92-93 school year. The Student Motivation Diagnostic Questionnaire (SMDQ) was administered to all of the ninth grade students (355 that were present at school that day), through their language arts classes (for a compiled list of the pretest data see the following table.) The day the SMDQ was administered, all language arts teachers were involved in a
county in-service program. Data were shared with each teacher individually before the Thanksgiving break.
<table>
<thead>
<tr>
<th>Case</th>
<th>Academic Discipline</th>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nineteen (Science)</td>
<td>96</td>
<td>94</td>
<td>96</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Twenty (English)</td>
<td>14*</td>
<td>51</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Twenty-one (Math)</td>
<td>57</td>
<td>24*</td>
<td>72</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Twenty-two (Science)</td>
<td>96</td>
<td>82*</td>
<td>92</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Twenty-three (English)</td>
<td>99</td>
<td>55</td>
<td>72</td>
<td>17*</td>
<td></td>
</tr>
<tr>
<td>Twenty-four (Math)</td>
<td>96</td>
<td>89</td>
<td>94</td>
<td>75*</td>
<td></td>
</tr>
<tr>
<td>Twenty-five (Science)</td>
<td>65</td>
<td>44*</td>
<td>72</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Twenty-six (English)</td>
<td>55</td>
<td>79</td>
<td>51*</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Twenty-seven (Math)</td>
<td>27</td>
<td>7*</td>
<td>51</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Twenty-eight (Science)</td>
<td>51</td>
<td>16*</td>
<td>72</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Twenty-nine (English)</td>
<td>24</td>
<td>68</td>
<td>20*</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Thirty (Math)</td>
<td>34</td>
<td>24</td>
<td>3*</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

* = target variable
The teachers will meet in their team groups once a week until the end of the school year to address the strategies for improving targeted aspects of student motivation. Information related to specific aspects of student motivation, as measured by the SMDQ, will be provided to the teachers both individually and as a group. The teachers aid each other in developing, monitoring, and evaluating strategies that are implemented to improve targeted aspects of student motivation. A posttest analysis will be conducted around May 15th of the 92-93 school year using the SMDQ.8

Case Nineteen

This teacher is a science teacher with 10 years of teaching experience. His lowest percentile score was 92 on the aspect of self-concept of ability. His initial reaction was an assumption that all the teachers involved had comparable scores. Since there does not exist an aspect of motivation that could be termed "deficient," this teacher's challenge is to maintain the percentile levels that were achieved in the pretest assessment.

This teacher will identify specific strategies that he employs to motivate his students. These strategies will be matched with the specific aspects of student motivation. He will share these motivational strategies with the teachers on his team. This process should aid him in maintaining the pretest levels as well as aid the other teachers on his team in developing their own strategies.
Case Twenty

Teacher twenty is an English teacher with seven years of teaching experience. She has chosen teacher expectations as the targeted aspect of student motivation. Her percentile score was 14 in this area. Her initial reaction to the data was one of interest and concern. She did not show considerable distress, but appeared to want to make efforts to improve this score as well as the scores of self-concept of ability and future utility (both were at the 20th percentile.)

Case Twenty-one

Teacher twenty-one is a first year mathematics teacher. She has chosen attitude toward teacher as the targeted aspect of student motivation. Her percentile score for this aspect was 24. Considering that this teacher was a first-year teacher, she had relatively high percentile scores in the other three aspects, 72 on self-concept of ability, 57 on teacher expectations, and 72 on future utility. Her initial reaction was concern over her perception that these percentile scores were similar to grades, and that she had "failed." The researcher explained that the scores represented student perceptions and should not be associated with graded work. He further explained that the scores could be beneficial only to the extent that the teacher wanted to address them. She stated that dealing with motivation was not one of the topics covered during her teacher preparation program in undergraduate school.
Case Twenty-two

This teacher is a third year science teacher, although she has other teacher-related experience totaling approximately five additional years. Her targeted aspect of student motivation is attitude toward teacher in which she had a percentile score of 82. She appears very willing to work towards improving the motivation of her students.

Case Twenty-three

Teacher twenty-three is an English teacher with 17 years of teaching experience. She had an extremely high percentile score (99th) in the area of teacher expectations. Her future utility score was 72 and the percentile score on attitude toward teacher was 55. The selected target variable for this teacher is self-concept of ability in which she had a percentile score of 17. Her reaction was one of little concern. She believed the scores demonstrated what she anticipated at that time of the year. She stated that she wants students to understand what is expected of them and why it is important they learn language arts. She did feel that a higher score would result in the area of self-concept of ability once students had "gotten used to her methods" of teaching. She was very cooperative with, and understanding of, the process for working on improving student motivation.

Case Twenty-four

Teacher twenty-four is a mathematics teacher with three years of teaching experience. His lowest percentile score was 75 on the aspect of self-concept of ability. He faces a challenge
of maintaining the high percentile scores on the other three aspects of student motivation while attempting to raise the self-concept of ability scores. He appeared comfortable with addressing this challenge.

Case Twenty-five

Teacher twenty-five is a science teacher with 13 years of teaching experience. His targeted aspect of student motivation is attitude toward teacher. The percentile score for this aspect was 44. This particular teacher's reaction to the information was a statement that this data did not mean very much since it was based solely on the students' perceptions. He was interested, however, in what percentile scores were considered "moderately" high. Upon further explanation about improving student motivation, this teacher seemed more cooperative in attempting to generate strategies that might raise the level of his target variable.

Case Twenty-six

Teacher twenty-six is an English teacher with 27 years of teaching experience. She had a high percentile score in the area of self-concept of ability (92nd) and her lowest percentile score was 51 on the aspect of future utility. Because of the relationship between future utility and teacher expectation, targeting future utility will probably effect the variable of teacher expectations as well. This teacher was very interested in learning more about student motivation and working to raise the percentile score on her target variable.
Case Twenty-seven

Teacher twenty-seven is a mathematics teacher with 20 years of experience. She had three areas that could have been targeted for improvement, self-concept of ability (22nd), teacher expectations (27th), and attitude toward teacher (7th). She chose to work on attitude toward teacher. This teacher was very emotionally upset about the pretest results. She works very hard at helping many of her students become successful, and therefore did not understand the low percentile score. In looking at the raw data, we discovered that many of her students had scored this aspect the 5's (the highest score), yet other students had rated this with 1's or 2's (the lowest scores). The result was an average raw score that produced the low percentile score. This teacher seemed to think that some of the low scores may have been a result of the students' feelings about last year's teacher and/or math course. Since returning from Thanksgiving break, this teacher has shown a real interest in improving the targeted aspect and has regained her positive outlook on her own teaching abilities. Because she is so conscientious, her effort in attempting to raise the percentile scores should be diligent.

Case Twenty-eight

This teacher is a science teacher with 21 years of experience. Her percentile scores on the aspects of teacher expectations (51st) and future utility (72nd) were moderately high. However, her percentile scores on the aspects of self-concept of ability (34th) and attitude toward teacher (16th) were
deficient. She chose attitude toward teacher as her target variable. This teacher’s reactions were somewhat mixed. She showed some displeasure in receiving low percentile scores on self-concept of ability and attitude toward teacher yet she felt good about the fact that her scores on the other two aspects were higher. She stated that the aspects of teacher expectations and future utility were more important to her than the other two aspects of student motivation. She shows a willingness to participate in the activities dealing with student motivation, yet the researcher is not sure about the level of commitment she has in actually implementing the strategies in her classroom.

Case Twenty-nine

Teacher twenty-nine is an English teacher with six years of experience. His targeted aspect of student motivation is future utility (20th percentile). He did have another aspect that could have been chosen as the target variable, teacher expectations (24th percentile). This teacher had relatively high percentile scores on the other two aspects of student motivation; 81st on self-concept of ability and 68th on attitude toward teacher. He appeared very concerned about receiving the deficient percentile score on future utility. He attributed the extensive amount of reading that the students were required to do early in the school year as a possible explanation. He was very interested in working to improve the percentile score for his target variable as well as raising the scores for the other aspects of motivation.
Case Thirty

Teacher thirty is a mathematics teacher with 24 years of experience. Her target variable was chosen to be future utility (3rd percentile). The other aspects seemed deficient also, but not at the level that future utility was scored. She felt one reason for this low percentile score was due in part to the number of geometry students that she taught. This teacher appeared very concerned about the percentile scores that she received and seemed very willing to work on strategies to improve not only her targeted aspect of student motivation, but on the other aspects of motivation as well. She took the data very personally and appears to have already initiated some strategies to change the students' perceptions. These include making a point to talk about the relevance of certain topics as they are discussed, demonstrating the relationships between math concepts and other disciplines, and sharing the types of math careers available to students once they finish their schooling.

Case Thirty-one

The students in this sixth grade science classroom are heterogeneously grouped. Their parents include university professors, factory workers, and mothers on welfare.

Teacher thirty-one is a nontraditional first-year teacher. She is about 35 years old and has decided her "call in life" is to instruct children. She has a strong background and has a bachelor's degree in science. However, she is weak on classroom management and has received no formal training in this area. She
was selected for this case study because she has a strong desire to become a more effective teacher.

The Student Motivation Diagnostic Questionnaire was administered by the school counselor with the following results:

Percentile Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>48</td>
<td>55</td>
<td>51</td>
<td>44</td>
</tr>
<tr>
<td>MATH</td>
<td>57</td>
<td>27</td>
<td>84</td>
<td>99</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>96</td>
<td>55</td>
<td>48</td>
<td>5*</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>82</td>
<td>24</td>
<td>38</td>
<td>7</td>
</tr>
</tbody>
</table>

* = target variable

This group of students obviously had deficiencies in their self-concepts of academic ability in both science and social studies. Because teacher thirty-one teaches science and this group of students were all enrolled in the same science class, self-concept of academic ability in science was selected as the target variable.

The teacher accepted the questionnaire results immediately and was anxious to get to work on improving the target variable. She suggested the results also be shared with the other sixth grade teachers.
The basic strategy selected and implemented was simple: Create tests covering smaller units that were relatively easy to pass, but difficult to get A's on. In addition, the researcher (the assistant principal) gave the teacher numerous articles on classroom management. He substitute-taught her class so she could visit with other teachers who were strong on discipline and classroom management techniques. She was paired with another sixth grade science teacher as a partner. The researcher made more frequent visits to teacher thirty-one's class and worked with her to break the units of instruction and testing into smaller units. The teacher has also signed up to participate in a classroom management workshop.

Plans are to administer a posttest to this group of students in the spring.

Case Thirty-two

The students participating in this case study are enrolled in the fifth grade of an elementary school serving various sections of a large metropolitan city. The population of the school is divided into kindergarten through fifth grades with three special education classes. The enrollment is about 800 with class sizes ranging from 25 to 32 students to one teacher.

The student population in the school is diverse in many aspects. Economically the students live in homes that range from government-subsidized housing to houses that are valued as high as $500,000. About 35% of the students participate in the free lunch program. The minority population in the school is about
46% and represents many nations. Many of the minority students participate in an English as a Second Language program. The remedial and gifted populations are about equal in numbers. Schoolwide test results show the fifth grades to be about average in reading and mathematics.

The parents are very active in school programs even though many of the students come from one-parent families or families in which both parents work outside of the home. The PTA provides teachers with funds for materials as well as supporting programs to enrich the school's curriculum. Volunteers work in the school several hundred hours each month.

Teacher thirty-two was selected to participate in this study because it was believed her students were fairly representative of the population of fifth graders in the school. She has more than 25 years of experience teaching fourth and fifth grade students at this same school. She currently teaches English at the fifth grade level.

The questionnaire was administered by the Assistant Principal while the teacher was outside the room. Students were encouraged to be honest about their feelings and to think about each question. They were assured of their anonymity. The directions were read to the students and they were monitored throughout the test. All questions were answered and the students seemed pleased to be asked their opinions about their educational process. The results are shown in the following table:
The pattern of scores for this case clearly indicates several motivational deficiencies in English, particularly when it is taken into consideration the motivational scores of these students in the other disciplines. The two areas selected as a focus for teaching strategies were Future Utility of English and Attitude Toward Teacher.

Strategies tentatively selected for improving Future Utility include the following:

1. Fifth grade students will serve as mentors for kindergarten and first grade students.

2. The teacher will incorporate and use more career materials in the curriculum.
Strategies tentatively selected for improving Attitude Toward Teacher include the following:

1. The teacher and counselor will work together to better understand the needs of the students and will cooperatively develop programs to meet the emotional as well as the academic needs of the students.

2. The teacher will be more selective in levels of difficulty of questions asked and consciously make an effort to provide sufficient "wait" time for students to respond to questions.

3. The teacher will use more humor in her class and avoid sarcasm.

Another strategy selected to improve both target variables is for the teacher to use positive statements, both orally and in body language, to encourage students.

Current plans are for a posttest to be administered in the Spring of this year.

Cases Thirty-three through Forty-eight

During the Spring of the 1990-1991 school year, the Ninth Grade Transition Task Force of a large suburban school district researched the difficulties experienced by ninth graders. Improving the transition from eighth grade to ninth grade became a primary focus of the local school and a goal for the 1991-1992 school year.

The research on ninth graders revealed that 75% of discipline problems and 57% of attendance problems at the school
were ninth grade students. In addition, 47% of first semester freshmen failed at least one course. An approach similar to the middle school concept in structure was developed to help eliminate some of the problems encountered by these ninth graders in the transition year, the first year of secondary school.

A program called the Ninth Grade Success Program was developed by the local school, presented to the Superintendent and funded by the Board of Education. The program was structured on the team concept. A cohort group of 80-115 ninth grade students share four teachers in the areas of English, math, science, and social studies. These teachers share a common planning period, as well as an additional planning period during the day. This time is used by the teachers to plan daily lessons that would emphasize interdisciplinary studies using strategies that are designed to meet the needs of the individual students. These teachers use the flexibility of the team to vary the length of activities and lessons based on the individual and group needs of the students.

Additional planning time offers more opportunities for parent conferences with the team of teachers. The program emphasizes parents becoming active partners in the education of their students. Conferences are pro-active and stress expectations and achievement. Student progress, attendance, and discipline are carefully monitored by teachers and parents. The teachers serve as advisors, counselors, and disciplinarians. The team concept increases awareness of the students' academic
Evaluation of the program is based on academic success, the number of discipline referrals, student attendance, parental involvement, and student surveys. The Student Motivation Diagnostic Questionnaire (SMDQ), as a part of a formative evaluation, was conducted in order to provide information to the Board of Education prior to the 1992-1993 budget deadline. Additionally, the information provided to teachers will aid teachers in their year-long effort to improve student motivation as an important component of the overall program.

The pretest data were collected at the end of the 6th week of the 1992-1993 school year. The SMDQ was administered to all of the ninth grade students (337) present in class through designated classes in each of the four teams. The questionnaire was administered to ninth graders in Team 1 in their English classes (Table 1 represents percentile scores for Team 1). The questionnaire was administered to ninth graders in Team 2 in their social studies classes (Table 2 represents percentile scores for Team 2). Team 3 ninth graders were administered the questionnaire in their English classes (Table 3 represents the percentile for Team 3). The questionnaire was administered in Team 4 in math classes (Table 4 represents the percentile for Team 4). The questionnaire was administered in all teams by a building level administrator and the classroom teachers were not present during the administration of the questionnaire.
Team 1

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Teacher</td>
<td>89</td>
<td>72</td>
</tr>
<tr>
<td>Future Utility</td>
<td>57</td>
<td>44*</td>
</tr>
<tr>
<td>Self Concept</td>
<td>38</td>
<td>5*</td>
</tr>
<tr>
<td>STUDIES</td>
<td>44*</td>
<td>58</td>
</tr>
</tbody>
</table>

* = target variable

Case Thirty-three (Team 1)

The English teacher in Team 1 has had five years of teaching experience. She has worked for several years in remedial education classes working with students who had difficulty in reading, writing, and basic math skills. Her lowest percentile score was for Teacher Expectations at the 51st percentile. She is working to provide activities that promote student thinking skills in order to raise the teacher expectation score.

Case Thirty-four (Team 1)

The math teacher in Team 1 has five years of teaching experience. A special education teacher works with this teacher in a team-teaching situation in these classes. The special education teacher has 17 years of teaching experience, including seven years in middle school. The lowest percentile for a target
variable is Future Utility at the 44th percentile. These teachers are working to provide activities that relate the content to life situations.

Case Thirty-five (Team 1)

The science teacher in Team 1 has 22 years of teaching experience. Her lowest percentile score for a target variable is Self Concept of ability at the 5th percentile. She is working to provide students with opportunities for success in science to improve their self-concepts of ability in science.

Case Thirty-six (Team 1)

The social studies teacher in Team 1 has 20 years of teaching experience. His lowest percentile score is Teacher Expectations at the 44th percentile. He is working to provide activities and strategies to help students use factual content in thinking skills.
### Team 2

#### Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>14*</td>
<td>60</td>
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</tr>
<tr>
<td>MATH</td>
<td>92</td>
<td>96</td>
<td>99</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>99</td>
<td>48*</td>
<td>58</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>82*</td>
<td>96</td>
<td>89</td>
</tr>
</tbody>
</table>

* = target variable

**Case Thirty-seven (Team 2)**

The English teacher has five years of experience. A special education teacher is working with this teacher in a team teaching situation. The special education teacher has 12 years of teaching experience. The lowest percentile score for a target variable is Teacher Expectations at the 14th percentile. These teachers are working to provide a variety of activities to promote high expectations in these classes.

**Case Thirty-eight (Team 2)**

The math teacher in Team 2 has one year of teaching experience. Her lowest percentile score is 92, on the aspect of Teacher Expectations. Since there does not exist an aspect of motivation that could be termed "deficient," this teacher's challenge is to maintain the level of percentile scores that were...
achieved on the pretest assessment.

Case Thirty-nine (Team 2)

The science teacher in Team 2 has 21 years of teaching experience. A special education teacher works with this teacher in a team teaching situation in these classes. The special education teacher has four years of teaching experience. The lowest percentile for a target variable is Attitude Toward Teacher at the 48th percentile. These teachers are creating situations in the classroom to interact on a one-to-one basis to create a better relationship between the teachers and the students.

Case Forty (Team 2)

The social studies teacher in Team 2 has two years of teaching experience. A special education teacher works with this teacher in a team teaching situation in these classes. The special education teacher has 15 years of teaching experience. The lowest percentile for a target variable is Teacher Expectations at the 82nd percentile. These teachers are attempting to provide more activities to promote thinking skills. These teachers face the challenge of maintaining the high percentile scores that were achieved in the pretest assessment.
Team 3

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>99</td>
<td>99</td>
<td>44</td>
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<tr>
<td>MATH</td>
<td>24*</td>
<td>61</td>
<td>94</td>
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<tr>
<td>SCIENCE</td>
<td>96</td>
<td>85</td>
<td>82</td>
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<tr>
<td>SOCIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDIES</td>
<td>3*</td>
<td>14</td>
<td>61</td>
</tr>
</tbody>
</table>

* = target variable

Case Forty-one (Team 3)

The English teacher in Team 3 has 10 years of teaching experience. Her lowest percentile score for a target variable is Self Concept of Ability at the 38th percentile. She is working to provide opportunities for students to have success in English in order to promote higher self concepts of ability for her students.

Case Forty-two (Team 3)

The math teacher in Team 3 has two years of teaching experience. Her lowest percentile score for a target variable is Teacher Expectations. She is working to provide activities and strategies that promote higher level thinking skills within the context of the content.
Case Forty-three (Team 3)

The science teacher in Team 3 has 11 years of teaching experience. His lowest percentile score is 67 on the aspect of Self Concept of ability. He is working to provide more opportunities for students to experience success in science. He hopes that with these successes that students will improve their perceptions of their ability in science.

Case Forty-four (Team 3)

The social studies teacher in Team 3 has three years of teaching experience. Her lowest percentile score is 3 on the aspect of Teacher Expectations. She is working to provide activities and strategies that will promote the students using more thinking skills in the social studies context.

Team 4

Percentile Scores

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Attitude</th>
<th>Future</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectations</td>
<td>Toward Teacher</td>
<td>Utility</td>
<td>Concept</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>43*</td>
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<tr>
<td>MATH</td>
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<td>85</td>
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<tr>
<td>SCIENCE</td>
<td>38</td>
<td>7*</td>
<td>79</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>31*</td>
<td>61</td>
<td>44</td>
</tr>
</tbody>
</table>

* = target variable
Case Forty-five (Team 4)

The English teacher in Team 4 is a first-year teacher. His lowest percentile score is 43 on the aspect of Teacher Expectations. He is working to provide activities and strategies to promote the use of higher level thinking skills in the presentation of the English content.

Case Forty-six (Team 4)

The math teacher in Team 4 has 14 years of teaching experience. Her lowest percentile score is 57 on the aspect of Teacher Expectations. She is working to provide activities and strategies to promote the use of higher-level thinking skills in math.

Case Forty-seven (Team 4)

The science teacher in Team 4 has 25 years of teaching experience. His lowest percentile score on a target variable is Attitude Toward Teacher at the 7th percentile. He is working to provide opportunities for one-on-one situations with students in the classroom in order to promote improved relationships between him and the students.

Case Forty-eight (Team 4)

The social studies teacher in Team 4 has eight years of teaching experience, including three years in a middle school. His lowest percentile score on a target variable is Teacher Expectations. He is working to provide activities and strategies which will encourage higher level thinking skills in the social studies content.
Team members in each of the four teams are responsible for coordination of the activities and the monitoring of the Ninth Success Program. Each team member works with members of his or her team to compile documentation on strategies that have been used in the classes and the results of the use of the strategies. Prior to the posttest assessment of motivation using the SMDQ, team members will share all the strategies used with all the teams and with the faculty members who teach 10th through 12th graders.

Cases Forty-nine and Fifty

Two middle school classroom social studies teachers were chosen for these case studies. Both classrooms are in a middle school in central Georgia. One teaches sixth grade students and the second is a seventh grade teacher. Grouping for instruction at the school follows the middle school concept. Each instructional team consists of three teachers who provide instruction in the academics. Students also receive instruction in exploratory courses taught by faculty outside this team.

Case Forty-nine

The sixth grade classroom is composed of 26 students ranging in age from 11 years to 13 years. The breakdown by age is as follows: 18 students are 11 years of age and have not repeated a grade since entering school; six students are 12 years of age and have repeated one grade; and two students are 13 years of age and have repeated two grades. The achievement level of the group is
high average; 65% of the students are reading one or more years above grade level.

Home environments of the students appear to be relatively stable. Slightly over 60% (16) of the students come from homes where both biological parents are present.

The class is comprised of 11 girls and 14 boys. Fifty-four percent of the students (14) are white and 46% (12) of the students are black. The students tend to come from middle class families in which both parents work at blue collar jobs. Parents of these students are active in P.T.A. and are very supportive of the school.

The teacher of the sixth grade classroom is in her tenth year as a middle school teacher. She has been with the local school system for five years. She holds the Bachelor of Science and Master of Education degrees in middle grades. She is presently working toward her Specialist in Education degree at Georgia College. Her reputation as a teacher is excellent. She is an enthusiastic professional and is involved in extra-curricular activities at the school. She holds the T-5 certification in middle grades. She was chosen to participate in this study because of her interest in participating in and conducting research. She hopes to continue study in student motivation and teacher performance as she progresses through further graduate study.
Mean Pretest Percentile Scores

<table>
<thead>
<tr>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
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<tr>
<td>SCIENCE</td>
<td>96</td>
<td>7</td>
<td>67</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>89</td>
<td>99</td>
<td>61*</td>
</tr>
</tbody>
</table>

* = target variable

Case Fifty

The seventh grade classroom is composed of 27 students ranging in age from 12 years to 15 years. The breakdown by age is as follows: 11 students are 12 years of age; 13 students are 13 years of age; two students are 14 years of age; and one student is 15 years of age. Two students have repeated one grade and one student has repeated two grades. The achievement level of the group is average. Test scores indicate that 11 students (41%) are reading on grade level; 10 students (37%) are reading one to two years above grade level; and six students (22%) are reading one year below grade level.

Home environments of these students are diverse. Only 12 students (44%) live with both biological parents. Seven students have parents who have never married; one student has a deceased parent; and seven students have parents who are separated or...
divorced. Sixty-three percent (17) of the students are black and 37% (10) of the students are white. They tend to come from lower middle class families. While the parents exhibit a cooperative nature when contacted by the school, they generally are not active supporters in the school's endeavors. The students function at an average or slightly below average achievement level.

The teacher in this case study is in her first year of teaching. She moved to the community last August, after obtaining her present teaching position. She graduated in June from the University of Georgia with a Bachelor of Science degree in middle grades education. She holds the bachelors level teaching certificate in grades four through eight. She was selected for the study because of the principal's recommendation. Her principal viewed her as one who is very professional and he believed she would be interested in improving the delivery of instruction to students. When asked if she would like to participate in the study she was very receptive. She has been very cooperative in setting up the testing situation and in providing a class description. Her teaching experiences include college practica and student teaching. Her student teaching was done in a school setting similar to the school in which she now teaches.

The pretest percentile scores for the students in Case Fifty are shown in the following table.
<table>
<thead>
<tr>
<th></th>
<th>Teacher Expectations</th>
<th>Attitude Toward Teacher</th>
<th>Future Utility</th>
<th>Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
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<td>79</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>MATH</td>
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<td>41</td>
<td>40</td>
<td>27</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>44</td>
<td>72</td>
<td>58</td>
<td>67</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>31</td>
<td>72</td>
<td>61</td>
<td>7*</td>
</tr>
</tbody>
</table>

* = target variable

Current plans are for the researcher, a local college professor, to continue working with the teachers in Cases Forty-nine and Fifty and to administer a posttest late in the Spring of the year.
Conclusions

The results of these case studies support four conclusions.

One - Most administrators and supervisors are able to identify teachers of classes with motivational deficiencies. In the first seven case studies the researchers were instructed to focus on a teacher "who is ineffective because they can't motivate students, but who could otherwise become an effective teacher (an ineffective teacher worth saving)." The target variables for these seven teachers ranged from a low of the third percentile to a high of the twenty-seventh percentile with a mean percentile of 11.14 for the target variables. In fact, four of the seven target variables were at the fifth percentile or lower. The only exceptions to this conclusion were noted for individual teachers in two case studies initiated, but later dropped, by two first-year assistant principals.

Two - Individual teachers are able to improve aspects of student motivation when administrators or supervisors support and monitor their efforts. In six of the eight studies reported in this paper with both pretest and posttest scores for individual teachers, the teachers were able to improve selected aspects of student motivation. In most of these cases, the improvement was evident in less than 12 weeks.

The evidence provided in this paper offers encouragement for those committed to improving student motivation. However, there are several points that appear to warrant special consideration.
Three - The position power base of the administrator can be critical for changing teacher behavior. For example, in Case Ten, the administrator was an assistant principal of the school in which the study was conducted. The researcher of that study and the senior author concluded that the researcher didn’t have sufficient position power to get a group of high school teachers to give students enough positive feedback to improve their self-concepts of academic ability. It should be noted, however, that in Case Nine a school psychologist was able to accomplish improved self-concepts of academic ability of middle school students under similar conditions.

Four - Improvement in one aspect of motivation may be accompanied by a decline in another aspect of motivation. In Case Three, teacher expectations in English improved from the twenty-seventh percentile to the fifty-eighth percentile, while self-concept of ability in English went down from the thirty-eighth percentile to the third percentile. Similar results were observed in Case Four. However, Case Two shows that teachers can improve both teacher expectations and self-concept of academic ability even when teacher expectations are relatively high (68th percentile).

Cases Thirteen through Sixteen show how the procedural model presented in this paper can be useful even when the students have average levels of motivation. The lowest target variable for this group of teachers was at the forty-first percentile, yet three of these four teachers were able to show an average
improvement of 17 percentile points in about 10 weeks. The data for the fourth teacher demonstrate the need to monitor student motivation. In this case mean motivation percentile scores in mathematics went from 64.5 to a mean of the 26th percentile in just 10 weeks.

The procedural model used for these case studies has proven to be useful for helping teachers of students with low levels of motivation. It has also been useful for monitoring and improving the motivation of students with average levels of motivation.

There is some evidence to indicate the model is more effective when each individual teacher has his or her own unique target variable. However, there is also evidence that groups of teachers can share and improve a common target variable, provided the position power base of the administrator or supervisor is strong. Future research should examine this last point.
References


The Authors

Dr. Kenneth M. Matthews
Professor
Educational Administration
University of Georgia
G-10 Aderhold Hall
Athens, Georgia 30602-7171

Dr. Barbara Roquemore
Assistant Principal
Duluth High School
3737 Brock Road NW
Duluth, Georgia 30136
(404) 476-5206

Ms. Georgia Beasley
Assistant Principal
Clarke Central High School
350 S. Milledge Avenue
Athens, Georgia 30605
(706) 357-5200

Mrs. Deanna Fraker
Principal
Walnut Grove Elementary
75 Taylor Road
Suwanee, Georgia 30174
(404) 513-6892

Dr. David Franks
Principal
Statesboro High School
10 Lester Road
Statesboro, Georgia 30458
(912) 489-8751

John Patrick Green
Assistant Principal
Berkmar High School
405 Pleasant Hill Road NW
Lilburn, Georgia 30247
(404) 921-3636

Dr. Larry Hulvey
School Psychologist
Wayne County Schools
555 S. Sunset Boulevard
Jesup, Georgia 31545
(912) 427-1001
Ms. Jackie Littlefield
Assistant Principal
High Point Elementary School
520 Greenland Road NE
Atlanta, Georgia 30342
(404) 843-7716

Mrs. Pat Lowrie
Assistant Principal
Sweetwater Middle School
3500 Cruse Road
Lawrenceville, Georgia 30245
(404) 923-4131

Dr. Judith Mahaffey
Assistant Superintendent
Jefferson City Schools
P. O. Box 507
Jefferson, Georgia 30549
(706) 367-9831

Ms. Charlotte McNeely
Assistant Principal
Woodland Elementary School
1130 Spalding Drive NE
Atlanta, Georgia 30350
(404) 551-5890

Dr. Marianne Melnick
Assistant Principal
Warner Robins High School
S. Davis Drive
P. O. Drawer 998
Warner Robins, Georgia 31088
(912) 929-7877

Ms. Marilyn Osborn
Assistant Principal
Peachtree Junior High School
4664 N. Peachtree Road
Atlanta, Georgia 30338
(404) 451-4613

Ms. Joanna Ramos
Counselor
International School Cyprus
11 Kassos Street
P. O.Box 3847
Nicosia, Cyprus
(011) 357-2-316-345
Dr. Lynda Royal
Assistant Principal
405 Pleasant Hill Road NW
Lilburn, Georgia 30047
(404) 921-3636

William Schofield
Assistant Principal
Social Circle High School
P. O. Box 1169
145 Clarke Avenue
Social Circle, Georgia 30279
(404) 464-2611

Ms. Dianne D. Shafer
Instructional Lead Teacher
Clarke Central High School
350 S. Milledge Avenue
Athens, Georgia 30605
(706) 357-5200

Dr. Elizabeth Youngblood
Graduate Coordinator
Georgia College
School of Education
Campus Box 072
Milledgeville, Georgia 31061-0490