

THE CORRELATION OF CLASSROOM ACADEMIC STATUS AND  
SOCIAL STATUS OF STUDENTS IN THE ELEMENTARY SCHOOL

THESIS

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## Abstract

The purpose of this study was to ascertain whether elementary school students' classroom academic status was significantly correlated to their classroom social status. This relationship was assessed at each grade level, one through six. An additional three classrooms from an achievement program within the building (MAP) at the fourth, fifth, and sixth grade levels were evaluated. There was a total of 201 subjects.

The sociometry of each classroom was determined by a peer nomination technique. Academic status was determined by teacher rating. These two variables were correlated using a Pearson Product-Moment Correlation program. A Chi-Square Test of Independence was also performed within the MAP sample.

The results indicated a statistically significant correlation at the first and third grade levels. There were no significant correlations in the intermediate grade levels. Implications for further research and classroom practice were discussed.

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## Chapter I

### Statement of the Problem

#### Purpose

The purpose of this study was to determine if there is a statistically significant correlation between classroom academic status and social status of elementary school students, grades one through six. Furthermore, the study intended to compare this correlation between a regular education program and an achievement based program.

#### Questions to be Answered

1. At each grade level (1-6), is there a statistically significant correlation between classroom academic status and social status?
2. Does the likelihood of a statistically significant correlation vary between a regular education setting and an achievement program setting?

## Need for the Study

It has been demonstrated that there are many relationships among achievement, popularity, self-esteem, and personal adjustment strategies and outcomes. Peer influence appears to be a powerful factor in children's academic and social learning environment. Parker and Asher (1987) suggest that "because low-accepted children experience limited opportunities for positive peer interaction, it follows that they would be relatively deprived of opportunities to learn normal, adaptive modes of social conduct and social cognition" (p. 358). Students have exhibited peer acceptance or rejection in response to different personal characteristics, and in varied degree depending on age group and setting. Teacher knowledge of a student's peer status can be useful information for designing classroom management and educational strategies.

Studies have shown that students will alter their self-presentation strategy to meet the expectations of their audience. "Behaviors that promote social acceptance in an adolescent peer group are likely to be different from those behaviors that adults (e.g., teachers and parents) value and reward" (Juvonen & Murdock, 1993, p.366). This study addresses the issue of varied audience by comparing a regular

education setting to an achievement setting. Maruyama, Miller, and Holtz (1986) assert “the preponderance of high-achieving students who possess adaptive educational values will enable other children to learn more readily to behave in ways that are educationally more functional by modeling the behaviors of their peers” (p. 731).

Educators of different grade levels would benefit from this study by understanding the academic/social correlation for students at each grade. Administrators may gain insight as to the importance of student morale and desire for success. As Cornell (1990) states, “In schools where there is a positive attitude toward achievement, high ability students may be well received, but in other schools they may be less popular, regardless of their personal characteristics” (p.155). Assessing a school population’s attitude toward achievement, and breaking down this academic/social connection between grades and programs, could provide the educational community with suggestions for bolstering students’ desire for success.

### Definition of Terms

Academic Rank A measure of academic success within a classroom. For the purpose of this study, teachers ranked their



students according to overall progress into four levels: High, High-Middle, Low-Middle, Low.

Achievement Program Self-contained fourth, fifth, and sixth grade classrooms in which the curriculum and expectations are more challenging than those of the regular education program. District students are placed in this program according to committee review of teacher nominated high academic achievers.

Sociometry “The study of interrelationships among members of a group--that is, its social structure: how each individual is perceived by the group” (Stanley & Hopkins, 1972, p. 403).

Sociometric Technique “data are gathered about individuals from their peers rather than from teachers or observers” (Mehrens & Lehman, 1978, p. 374).

Sociogram “a diagram that allows for the visual representation of the social structure of the group” (Helton, Workman, & Matuszek, 1982, p. 300). This information can be presented in a circular diagram, where the most popular student (the star) is placed in the innermost concentric circle, while the least popular student (the isolate) is represented in the outermost

concentric circle. For the purpose of this study, the sociometric data were represented graphically (see Appendix B).

Classroom Social Status The sociometry of each class as derived from sociometric techniques.

### Limitations of the Study

Academic ranking of students was completed by each teacher in the form of an overall content estimate. Individual teachers' grading style may be subjective in nature and, therefore, not consistent.

The achievement program used for comparison in this study is composed of students in grades four, five, and six. A grade to grade comparison between regular education and achievement program is limited to those three grades.

The achievement program classrooms are grouped homogeneously according to ability. This homogeneity of ability scores may influence the correlation values for that sample.

## Summary

This was a social/academic study which sought to discover students' response to peer relationships in an elementary school setting. It did so by obtaining a correlation between each student's social rank (as determined by a classroom sociometric technique) and his/her academic rank (as determined by teacher rating). Data are assessed across grade levels, and between a regular educational and achievement based program.

## Chapter II

### Review Of The Literature

Educators have assessed students' academic performance for centuries. Researchers now agree that academic performance in a school setting is influenced by more than individual ability. Factors such as self-esteem, social approval, and peer relations are interactive forces. Cornell (1990) makes reference to the work of Piaget (1965) and Erikson (1963) in emphasizing that "the child's interactions with peers provide a context for cognitive development, the growth of social skills, the evolution of self-concept, and the establishment of moral and social values" (Cornell, p. 155). Helton, Workman, and Matuszek (1982) contend that "a child's academic behaviors must be viewed in the ecological context of peer behavior" (p. 298).

Teacher observation is a helpful but limited view of a classroom's sociometry. "In evaluating such characteristics as popularity, leadership ability, power, and concern for others, fellow students are often better judges than teachers" (Mehrens & Lehman, 1978, p. 370).

## Sociometric Techniques

Stanley and Hopkins (1972) discussed methods of implementing sociometric techniques. A *nomination technique* begins with the teacher asking each student to indicate three other students with whom they chose to associate. The form of association should be specifically indicated (e.g. who would you like to study with, sit next to, play a game with, etc.). A *guess who technique* requires students to match classmates' names to descriptions (e.g. someone who is nice to everyone, who always seems sad, etc.). The technique chosen should consider the age or level of the student, and assure anonymity and sensitivity in its administration. The resulting matrix or sociogram graphically displays students' choices for peer relationships.

Researchers have adapted this basic sociometric strategy to address studies from different populations. Picture-board techniques have been utilized to assess preschool childrens' social preferences. This method displays black and white polaroid photographs of each child and asks them to point to three students whom they especially like and three whom they especially dislike. Gottman (1977) augmented this procedure with rater observations to define behaviors of the socially isolated child. Moore and Updegraff (1964) added observers to

their study of dependence and nurturance giving behaviors of preschool children as correlated to their social status. Hartup, Glazer, and Charlesworth (1967) also utilized these techniques to assess the correlation between social status and the giving and receiving of positive and negative social reinforcement. Dion and Berscheid (1974) combined the use of the picture-board and additional statements of student behaviors to derive nominations of popular students. They added adult judges of student attractiveness, and found a correlation between popularity and physical attractiveness in this preschool group.

A Likert scale has been used with first and second graders in assigning popularity votes to peers. Riley (1985) devised the Sociometric Peer-Rating Scale, in which students respond to descriptive statements by circling a happy face, a neutral face, or a sad face for each classmate named. This group administered format was compared to an individually administered method devised by Asher, Singleton, Tinsley, and Hymel (1979), and found to have a split-half reliability of .83. The test-retest reliability was .69 after a period of seven months, as opposed to a four week retest value of .81 in the Asher *et al* measure.

Popular to unpopular social dimensions were expanded upon by Coie, Dodge, and Coppotelli (1982). These researchers correlated a peer nomination technique with nominations in

response to behavioral descriptions for third, fifth, and eighth grade students. The results identified five sociometric status groups: popular, rejected, neglected, controversial, and average. These studies reveal a wealth of information that can be gathered through the use of sociometric techniques.

### Social Status and Academic Success

Research has attempted to determine whether positive peer relations lead to academic achievement. Pelligrini (1992) studied kindergartners' social learning experience for two years, comparing the interaction of peers during object play to the unilateral interaction of teacher-directed learning. At the end of first grade, he found that "peer interaction was positively related to achievement, whereas adult-directed behaviors were negatively related to achievement" (p.572).

The direct connection between social status and reading achievement was examined in a study of sixth grade students. Porterfield and Schlihting (1961) described this relationship according to "the somewhat similar personal characteristics which have been ascribed to persons with certain peer status and to persons with certain reading achievement status" (p. 291). Some of these traits include cheerfulness, enthusiasm, participation with the group, leadership ability, persistence,

self-control, and an introspective nature. Results indicated a significant correlation between prestige status and reading achievement status. Harter (1979) focused on many of these same traits when she developed a self-report scale of intrinsic versus extrinsic orientation in the classroom. Data suggest that there is a shift from intrinsic to extrinsic orientation across grades three through nine.

Social nominations were divided into workmate, playmate, and best friend categories for fourth, sixth, and eighth grade low-socioeconomic status black children in a study by Morris and Jackson (1986). At all three grade levels there was a significant correlation between high achievement and popularity as a workmate. Furthermore, high achievement was inversely related to popularity as a playmate and friend at the fourth grade level. The authors suggest that "although high achievement may be recognized for its adaptive value in a work-related context, it may actually be something of a social liability among younger children choosing partners for social and athletic activities" (Morris & Jackson, 1986, p.39).

The influence that popular and high-achieving students have on their peers has been questioned. Epstein and Karweit (1983) "see strong evidence that students both low and high in achievement are positively and cumulatively influenced on achievement by high-achieving friends" (p.198). Maruyama,



Miller, and Holtz (1986) attempted to test this evidence in a study of school desegregation. The lateral transmission of values hypothesis, which suggests that achievement-related values of successful students will become internalized by others, failed in this setting. Instead, the prior achievement level of students remained stable and was the determinant of peer acceptance in the desegregated environment.

### Self-Esteem, Popularity, and Achievement

Other studies have reviewed the involvement of self-esteem with achievement and popularity. In one experiment, causal relationships between social class, ability, achievement, and self-esteem were assessed. Maruyama, Rubin, and Kingsbury (1981) concluded that social class and ability were interrelated, both causing achievement and self-esteem. However, achievement and self-esteem were not causally related. Cornell (1990) compared popular to unpopular gifted students in terms of these same factors. He found that the less popular students had significantly lower academic self-esteem and social self-concept than their more popular peers.

## Self-Esteem and Domain Values at Early Adolescence

Several studies have raised questions about the effects of transitioning from elementary school to middle or junior high school settings. Researchers note that adolescents become oriented toward three basic value domains: academics, popularity, or athletics. Roberts and Peterson (1992) cited Brown, Lohr, and McClanahan (1986) and Kandel (1978) in suggesting that “Peer influences may either encourage or discourage academic success depending on the dominant value within the peer group” (Roberts & Peterson, p.198).

The view that adolescence is a time of turmoil and stress has been challenged in more recent studies. Eccles, Wigfield, Flanagan, Miller, Reuman, and Yee (1989) studied the transitional year to junior high school in terms of students’ self-concept of ability in the domain areas and their general self-esteem. They summarize, “Given the general stereotype of early adolescence as a period of storm and stress, there is remarkable stability and consistency in the variables discussed in this article at both the individual and group level” (p.306). Nottelmann (1987) agreed that student self-esteem remained relatively stable, while noting that the developmental timing of this transition may be more problematic for girls than for boys. She indicated that “self-esteem was more strongly related to

social than to cognitive or physical competence for girls, self-esteem was related at a similar level to these three domains for boys” (p. 447).

The differences between male and female adolescent self-esteem were also noted by Walker and Greene (1985). In their study of 11 to 18 year olds, “Boys’ self-evaluations in the area of school performance were most predictive of their overall self-esteem. Self-evaluation of popularity was the most important predictor of girls’ overall self-esteem” (p. 319). Eder (1985) studied female peer relations among girls in sixth, seventh, and eighth grades. She found that by eighth grade a very stable hierarchy of cliques arose, with highest status awarded to cheerleaders and student council members. However, due to the limited number of girls physically capable of being in this group, popular students rejected a large number of less popular students. This led to resentment and dislike of the popular girls, thus the cycle of popularity continues.

### Interpersonal Skills and Popularity

Nonverbal communication skills may influence popularity and achievement. Nowicki and Duke (1991) found that “Children who were better at decoding nonverbal

emotional information in faces and tones of voice were more popular, more likely to be internally controlled, and more likely to have higher academic achievement scores" (p. 385).

Attributional research suggests that individuals alter their presentation strategy to elicit a desired response. This theory was applied to early adolescents to determine whether they would present a different level of ability and effort to peers than to teachers. Juvonen and Murdock (1993) discovered that "eighth-grade students believed teachers to prefer successful students who were high in both ability and effort; conversely, they believed that these same students would be the least popular among their peers" (p. 373).

### Popularity and Future Maladjustment

Children who receive negative peer reactions may be at risk for poor personal adjustment. Juvonen (1991) concluded that the level of social rejection or support the deviant behavior elicited depended on students interpretation of the deviant's responsibility for his actions. Parker and Asher (1987) concluded that, if a child suffers low peer acceptance in response to deviant behavior, this response limits socialization experience and may result in maladjusted outcomes such as dropping out, crime, or psychopathology.

Student strategies for social competence were reviewed in an article by Gottman, Gonso, and Rasmussen (1975). They noted that “Unpopular children are more likely to be disproportionately represented later in life in a community-wide psychiatric register; they are also more likely to receive bad-conduct discharges from the armed forces” (p. 709). These authors cited Stengel (1971) in concluding that “social isolation is the common denominator of a number of factors correlated with a high suicide rate” (p. 709).

### Summary

Research has analyzed student popularity and achievement on many levels, with a variety of tools, in a range of settings. Most theorists assert correlations among self-esteem, popularity, achievement, and later personal adjustment. Developmental patterns of interactions have been established. Peck (1989) suggests the utility of these data in establishing classroom cooperative learning groups. Other researchers note uses of this information to include early social skills training and the assigning of students to programs according to their social/academic learning style. With ever-changing family styles and academic standards, there remains ongoing research possibilities in these areas.

## Chapter III

### Design of the Study

#### Purpose

The purpose of this study was to determine if there is a statistically significant correlation between classroom academic status and social status of elementary school students, grades one through six. This correlation was assessed in a regular education program and in an achievement based program.

#### Methodology

##### Subjects

This study utilized six classrooms of students (one class from each grade, one through six) in the regular education program of an urban neighborhood school. There was a total of 201 students. The student population was predominantly black, low socioeconomic status.

In addition, three classrooms were included (one class from each available grade, four through six) in the Major Achievement Program (MAP). This is an achievement based

program in the school district. The student population of MAP is based on teacher nomination and committee review of high academic achievers, with an attempt made to balance for race at each location. The MAP program is composed of fourth, fifth, and sixth grade classes which are integrated into the various schools in terms of logistics, specials, and school functions. However, this program functions independently in terms of curriculum and materials. MAP's academic standards are one to one and a half years above those of the regular curriculum.

### Procedures

A cooperating teacher was recruited from each regular grade level, one through six, and from each MAP grade level, four through six. Teachers were provided with a standard method of administering the sociometric technique to their students (see Appendix A). They were told to provide each student with a class list, and to have each student circle the names of his/her "three favorite people" in the class. First grade students were allowed to verbally state the names to the researcher in private to rule out reading errors. Students wrote their own name on the top of the list and returned it to the teacher.

Cooperating teachers then ranked their students into four categories of overall academic progress: high, high-middle,

low-middle, low. Student response sheets and teacher rankings were collected by the researcher for analysis.

### Analysis of Data

A student social rank was obtained from most to least popular, according to the number of peer nominations received. Each student was also assigned a numerical academic rating of 1 (low) to 4 (high) by their classroom teacher. The sociometric and academic data were entered onto a spreadsheet for each classroom involved (see Appendix B). A Pearson Product-Moment Correlation program was utilized to correlate the two variables within each class.

Additionally, a Chi-Square Test of Independence was performed on each of the three MAP classes, grades four through six.

Nine null hypotheses were tested to determine whether there was a statistically significant correlation between classroom academic status and social status of elementary school students.



## Summary

Academic and social data were collected for students in six regular education classes and three achievement program classes in an urban elementary school. Within each class, data were analyzed to determine whether a correlation existed between the academic and social status of its students. Across levels, data were utilized to determine grade levels or program with the strongest correlations.

## Chapter IV

### Analysis of the Data

#### Purpose

The purpose of this study was to determine if there is a statistically significant correlation between classroom academic status and social status of elementary school students, grades one through six. This study compared this correlation between a regular education program and an achievement based program (MAP).

#### Findings and Interpretations

Each student received two different scores that were tabulated and correlated using Microsoft Excell and the Pearson Product-Moment Correlation programs (see Appendix B). Social status data were based on peer nominations, and ranged from 0-12 votes. Academic status data were based on teacher nominations, and ranged from 1-4.

In addition, a Chi-Square Test of Independence was utilized to further assess the relationship between the two

variables described for the fourth, fifth, and sixth grade MAP classes. Nine null hypotheses were tested.

### Regular Education Program, Grades 1-6

#### Null Hypothesis I

There will be no statistically significant correlation between classroom academic status and social status of first grade students.

The critical value for this class was .41 at the .05 significance level with 21 degrees of freedom. The correlation value of .43 was above the critical value, thus the null hypothesis was rejected. There was a statistically significant correlation between classroom academic status and social status of first grade students.

#### Null Hypothesis II

There will be no statistically significant correlation between classroom academic status and social status of second grade students.

The critical value for this class was .39 at the .05 significance level with 22 degrees of freedom. The correlation value of .37 was below the critical value, thus the null hypothesis was retained. There was no statistically significant

correlation between classroom academic status and social status of second grade students.

### Null Hypothesis III

There will be no statistically significant correlation between classroom academic status and social status of third grade students.

The critical value for this class was .38 at the .05 significance level with 25 degrees of freedom. The correlation value of .51 was above the critical value, thus the null hypothesis was rejected. There was a statistically significant correlation between classroom academic status and social status of third grade students.

### Null Hypothesis IV

There will be no statistically significant correlation between classroom academic status and social status of fourth grade students.

The critical value for this class was .39 at the .05 significance level with 22 degrees of freedom. The correlation value of .18 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between classroom academic status and social status of fourth grade students.

### Null Hypothesis V

There will be no statistically significant correlation between classroom academic status and social status of fifth grade students.

The critical value for this class was .42 at the .05 significance level with 20 degrees of freedom. The correlation value of .02 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between classroom academic status and social status of fifth grade students.

### Null Hypothesis VI

There will be no statistically significant correlation between classroom academic status and social status of sixth grade students.

The critical value for this class was .37 at the .05 significance level with 26 degrees of freedom. The correlation value of .28 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between classroom academic status and social status of sixth grade students.

Major Achievement Program (MAP), Grades 4-6

### Null Hypothesis VII

There will be no statistically significant correlation between classroom academic status and social status of fourth grade MAP students.

The critical value for this class was .40 at the .05 significance level with 16 degrees of freedom. The correlation value of -.22 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between classroom academic status and social status of fourth grade MAP students.

### Null Hypothesis VIII

There will be no statistically significant correlation between classroom academic status and social status of fifth grade MAP students.

The critical value for this class was .40 at the .05 significance level with 16 degrees of freedom. The correlation value of .39 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between the classroom academic status and social status of fifth grade MAP students.

### Null Hypothesis IX

There will be no statistically significant correlation between classroom academic status and social status of fifth grade MAP students.

The critical value for this class was .41 at the .05 significance level with 15 degrees of freedom. The correlation value of .30 was below the critical value, thus the null hypothesis was retained. There was no statistically significant correlation between the classroom academic status and social status of sixth grade MAP students.

Table I

Overview of Pearson Product-Moment Correlation Values

	Critical Value	Calculated Value
Grade 1, Regular Ed.	.41	.43 *
Grade 2, “	.39	.37
Grade 3, “	.38	.51 *
Grade 4, “	.39	.18
Grade 5, “	.42	.02
Grade 6, “	.37	.28
Grade 4, MAP	.40	-.22
Grade 5, “	.40	.39
Grade 6, “	.41	.30

\* Significant correlation at the .05 level

Two of the nine groups tested demonstrated a significant correlation between classroom academic status and social status. These groups were the first and third grade regular education classes. The second grade calculated value is also near the critical value, suggesting the greatest likelihood of a correlation to be in the regular education primary grades unit.



The calculated values dropped sharply in the intermediate unit, with the fourth and fifth grades showing the lowest correlations in the regular education program.

The Major Achievement Program (MAP) showed suspicious variation in its correlation values. Upon reviewing these groups' data sheets (Appendix B), it was apparent that the classes were quite homogeneous in their academic scores. The great majority of students received an academic rating of 3 or 4, whereas the regular education students received a range of ratings from 1 to 4. To further assess the relationship between the two variables in this sample, a Chi-Square Test of Independence was completed for each MAP class, grades four, five, and six.

#### Chi-Square Analysis: Definitions and Tables

Table Columns: Academic Status

Low - Teacher rating of 1 or 2

Average - Teacher rating of 3

High - Teacher rating of 4

Table Rows: Social Status

Unpopular - 0 to 1 peer nomination

Average - 2 to 3 peer nominations

Popular - 4 or more peer nominations

Table 2

Fourth Grade MAP

	Low	Average	High	
Unpopular	E=.33 O=0	E=2.66 O=3	E=3.00 O=3	O=6
Average	E=.22 O=0	E=1.77 O=2	E=2.00 O=2	O=4
Popular	E=.44 O=1	E=3.55 O=3	E=4.00 O=4	O=8
	O=1	O=8	O=9	Totals

N=18

Critical Value = 9.49

Degrees of Freedom = 4

Chi-Square = 1.41

The calculated value of 1.41 was below the critical value of 9.49, thus the null hypothesis for this group was once again retained. There was no statistically significant correlation between the classroom academic status and social status of fourth grade MAP students.

The academic homogeneity of this group is apparent when examining cell totals. Ninety-five percent of students received academic ratings of 3 or 4, whereas the observed social status totals were more evenly distributed.

Table 3

Fifth Grade MAP

	Low	Average	High	
Unpopular	E=.44 O=1	E=2.00 O=2	E=1.55 O=1	O=4
Average	E=1.11 O=1	E=5.00 O=5	E=3.88 O=4	O=10
Popular	E=.44 O=0	E=2.00 O=2	E=1.55 O=2	O=4
	O=2	O=9	O=7	Totals

N=18

Critical Value = 9.49

Degrees of Freedom = 4

Chi-Square = 4.70

The calculated value of 4.70 was below the critical value of 9.49, thus the null hypothesis for this group was once again retained. There was no statistically significant correlation between the academic status and social status of fifth grade MAP students.

The academic column totals show that 89% of students received ratings of 3 or 4. The majority of students received an average number of social votes (2-3).

Table 4

Sixth Grade MAP

	Low	Average	High	
Unpopular	E=.71 O=1	E=.88 O=2	E=1.41 O=0	O=3
Average	E=1.65 O=2	E=2.06 O=1	E=3.29 O=4	O=7
Popular	E=1.65 O=1	E=2.06 O=2	E=3.29 O=4	O=7
	O=4	O=5	O=8	Totals

N = 17

Critical Value = 9.49

Degrees of Freedom = 4

Chi-Square = 5.81

The calculated value of 5.81 was below the critical value of 9.49, thus the null hypothesis for this group was once again retained. There was no statistically significant correlation between the classroom academic status and social status of sixth grade MAP students.

The column totals for this group showed slightly less academic homogeneity, with 76% of students receiving average to high (3 to 4) ratings as compared to 95% and 89% in the other two MAP classes. This class also had the calculated Chi-

Square value which came closest to the critical value, although still not statistically significant.

### Summary

Nine null hypothesis were tested through the use of a Pearson Product-Moment Correlation program. Two of these nine hypothesis were rejected at the .05 level of significance. There appears to be a statistically significant correlation between classroom academic status and social status of elementary school students in grades one and three. Grade two also had a value near the critical mark, and appears to suggest some educational significance at the primary grade level.

A Chi-Square Test of Independence was utilized to further test the relationship between academic status and social status of the fourth, fifth, and sixth grade achievement program classes. Again the null hypotheses for these groups were retained.

## Chapter 5

### Conclusions and Implications

#### Purpose

The purpose of this study was to determine if there is a statistically significant correlation between classroom academic status and social status of elementary school students, grades one through six. This correlation was assessed in a regular education program and in an achievement based program (MAP).

#### Conclusions

The results of this investigation demonstrated that there was not a consistent correlation between classroom academic status and social status of elementary school students. However, the data provided some noteworthy observations.

Two of the nine null hypotheses were rejected, at the first grade and the third grade levels. The value for the second grade level was near the critical value, presenting the primary unit (grades 1-3) as the age range when high achievers are likely to be the most popular students. Teachers at these levels

reported that students who were strong academically also attempted to please authority, demonstrated pro-social behavior, and were admired by their peers.

Referring to Table I, correlation values dropped sharply at the fourth and fifth grade levels, then rose again slightly at the sixth grade level. These weaker correlations would suggest that students have become less willing to please authority and more concerned with peer pressure for social purposes. Teachers at these grade levels reported that students become inhibited to participate in learning situations for fear of being ridiculed.

Results from the achievement program sample were rather confounding, ranging from a negative value in fourth grade MAP to a near critical value in sixth grade MAP. Further analysis with the Chi-Square Test of Independence resulted in retaining the null hypothesis for each of the three MAP classes. Scrutiny of these measures revealed a very homogeneous sample that did not lend itself well to correlation analysis. Teachers report that these students, unlike the regular education sample at these grades, are competitive for academic success.

### Implications for Research

The finding that academic status and social status are correlated in the primary grades but fade in the intermediate unit would lend itself to a longitudinal study which follows the popular achievers through the elementary school years. More extensive peer review scales could be incorporated to attempt to determine how classmates' views of popular achievers change over time.

In sharing classroom sociometric data with each teacher, many were surprised at the results. Teachers' perceptions of student popularity appeared to be based on their opinion of the student's behavior. Therefore, an alternate form of this study could investigate the correlation between academic progress and classroom behavior.

This study was conducted in an inner city environment that was plagued with violence and dysfunctional living. It would be interesting to do a comparative study using several city and suburban schools to determine whether the drop in popularity among achievers at the intermediate level is more likely to occur in difficult urban environments.



### Implications for the Classroom

The procedure and the data sheets assembled for each classroom may provide teachers with a model for administering and assessing their own classroom's sociometry. This is a practical and valuable tool to use for forming cooperative groups, as well as for understanding the group dynamics that may control some students. The review of the literature section of this report provides teachers with various sociometric formats for a range of age groups.

The observation that young children are likely to view achievers in a popular light, and that this likelihood decreases into the intermediate grades, provides teachers with insight of students' changing attitudes. Perhaps knowledge of this change would inspire administrators and teachers to wage more "success is cool" campaigns and rewards for students at these levels.

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## APPENDIX A

### Teacher Instructions

### Cooperating Teachers:

I spoke with each of you this fall about enlisting your help in the completion of my Master's Thesis. If you feel willing and ready, I'd like to start collecting data from your class.

I have attached a summary of the purpose and procedures of the study. I would just like to clarify the two tasks that I need you to do so that the procedure can be standardized.

1. Collect student responses for use in creating a sociogram:

- Since you will be asking your students to rate the popularity of their peers, please discuss with them the confidentiality and sensitivity of the task.

- Give each student a class list and ask them to "Circle the names of their three favorite people". (I will make and copy your class lists for you if you want) \*Please have students write their own name on top. You can administer this to the whole class, or to individuals or small groups. Let me know if you need extra hands.

- Give me the response sheets and I will map them out for you. I'll give you the information for your own use or interest. Students names will not appear on the thesis.

2. Rank your students according to overall academic progress:

- I realize that an absolute ranking will be difficult because of students' varied strengths. Therefore, please cluster them into four categories:

High

High-middle

Low-middle

Low

- When I get the academic ranking from you, I will correlate social and academic status.

I am **very grateful** for your involvement in this project! Let me know if you have any additional questions or concerns. Thanks again.

Linda Cook



## APPENDIX B

### Classroom Data Sheets

STUDENTS REORDERED INTO DESCENDING SOCIAL RANK																								
		L	C	S	U	B	H	K	O	F	P	W	A	I	N	V	G	E	M	R	T	D	J	Q
STUDENTS	A					1			1		1													
ORDERED	B	1		1				1																
ALPHABETICALLY	C			1										1		1								
	D	1	1																	1				
	E	1								1						1								
	F	1				1		1																
	G				1								1					1						
	H				1				1						1									
	I		1			1	1																	
	J	1					1				1													
	K	1		1						1														
	L		1	1		1																		
	M				1							1			1									
	N		1		1			1																
	O						1					1	1											
	P				1				1			1												
	Q				1		1														1			
	R	1	1	1																				
	S	1	1					1																
	T	1	1	1																				
	U		1	1							1													
	V					1				1				1										
	W								1								1		1					
Social Rank		9	8	7	6	5	4	4	4	3	3	3	2	2	2	2	1	1	1	1	1	0	0	0
Academic Rank		3	4	4	3	2	3	4	1	2	2	2	1	3	1	1	1	1	2	2	4	2	1	4
0.434266835																								









		STUDENTS REORDERED INTO DESCENDING SOCIAL RANK																											
		Z	S	Y	K	V	F	R	B	E	G	J	P	U	X	A	I	M	W	D	N	Q	T	BB	C	H	L	O	AA
STUDENTS	A						1			1		1																	
ORDERED	B	1								1		1																	
ALPHABETICALLY	C	1					1			1																			
	D	1											1									1							
	E								1			1					1												
	F										1					1		1											
	G	1					1									1													
	H		1				1		1																				
	I								1	1		1																	
	J								1					1			1												
	K		1	1		1																							
	L		1		1																				1				
	M		1	1															1										
	N	1	1	1																									
	O	1	1	1																									
	P				1	1													1										
	Q		1	1																1									
	R	1				1																							
	S	1		1														1											
	T	1						1							1														
	U				1			1							1														
	V																												
	W			1	1								1																
	X	1						1						1															
	Y	1			1																		1						
	Z		1	1		1																							
	AA	1				1		1																					
	BB				1								1	1															
Social Rank		12	8	8	6	5	4	4	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1	1	0	0	0	0	0
Academic Rank		3	4	4	1	4	3	3	3	2	2	3	4	2	4	2	3	1	2	3	3	4	1	1	2	3	3	3	2
0.280985069																													

50

		STUDENTS REORDERED INTO DESCENDING SOCIAL RANK																	
		A	G	B	C	L	D	O	Q	M	H	P	R	E	F	I	K	N	J
STUDENTS ORDERED ALPHABETICALLY	A					1	1					1							
	B	1	1			1													
	C								1	1						1			
	D	1		1													1		
	E				1		1					1							
	F				1			1	1										
	G	1		1				1											
	H		1			1								1					
	I				1				1	1									
	J		1			1		1											
	K			1				1	1										
	L	1	1											1					
	M		1							1									1
	N	1		1				1											
	O			1	1							1							
	P	1	1												1				
	Q				1						1					1			
	R	1				1						1							
	Social Rank		7	6	5	5	5	4	4	4	3	2	2	2	1	1	1	1	1
Academic Rank		4	1	3	4	4	3	3	4	3	4	4	3	4	3	4	3	3	4
		-0.220564387																	



		STUDENTS REORDERED INTO DESCENDING SOCIAL RANK																	
		B	R	D	Q	A	C	G	M	N	O	E	H	L	K	F	S	I	P
STUDENTS ORDERED ALPHABETICALLY	A	1		1				1											
	B						1	1		1									
	C	1						1								1			
	D					1						1	1						
	E	1		1									1						
	F		1			1	1												
	G	1				1	1												
	H	1		1									1						
	I			1									1	1					
	J		1							1	1								
	K		1		1							1							
	L		1		1						1								
	M	1								1						1			
	N	1			1										1				
	O		1		1										1				
	P		1									1			1				
	Q									1		1						1	
	R	1	1													1			
	Social Rank		8	7	4	4	3	3	3	3	3	3	3	3	3	2	1	1	0
Academic Rank		4	4	3	3	4	3	3	4	3	3	3	2	4	4	3	3	1	4
0.394425441																			

		STUDENTS REORDERED INTO DESCENDING SOCIAL RANK																
		D	J	O	P	Q	C	F	G	I	N	A	K	L	M	H	B	E
STUDENTS	A	1					1	1										
ORDERED	B	1							1	1								
ALPHABETICALLY	C	1						1	1									
	D						1	1	1									
	E					1		1				1						
	F	1					1					1						
	G	1				1	1											
	H		1			1				1								
	I			1		1										1		
	J			1	1						1							
	K					1								1	1			
	L				1							1			1			
	M			1								1	1					
	N		1	1	1													
	O		1		1						1							
	P		1	1							1							
	Q		1		1					1								
Social Rank		5	5	5	5	5	4	4	3	3	3	2	2	2	2	1	0	0
Academic Rank		4	4	3	4	2	3	4	4	2	4	4	2	4	3	1	3	3
0.303547231																		