

**Student Writing Achievement and  
Attitudes Toward School in  
Healthy and Unhealthy Districts: A Research Report**

Ruie Jane Pritchard  
Dept. of Curr. & Inst.  
NC State University  
402C Poe Hall, Box 7801  
Raleigh, NC 27695-7801  
919-515-1784  
919-515-6978 FAX  
ruie\_pritchard@ncsu.edu

Jon C. Marshall  
State Univ.of W. Georgia  
Educational Leadership &  
Professional Studies  
153 Education Annex  
.Carrollton, GA 30118  
707-836-4447  
605-343-3906 FAX  
[JonCMarshall@aol.com](mailto:JonCMarshall@aol.com)

Donna Morrow  
Ed. Techn. & Prof. Studies  
Christchurch College of Ed  
Dovedale Ave., Ilam  
P.O. Box 31-065  
Christchurch, 8030, N.Z  
011-64-3-343-7780 ext. 8109  
011-64-3-348-4311 FAX  
[donna.morrow@cce.ac.nz](mailto:donna.morrow@cce.ac.nz)

January 2003

Hawaii International Conference on Education

Honolulu, HI

# **Student Writing Achievement and Attitudes Toward School in Healthy and Unhealthy Districts: A Research Report**

## **ABSTRACT**

This research is part of a larger study of district organization and leadership conducted in 18 school districts. The current study investigates the relation between district culture, student achievement, and positive and negative student attitudes about their schools. Perceptions of students as expressed in more than 2,000 essays written about their schools are explored to see if they represent the norms, assumptions and beliefs of the larger school district, as discerned in an in-depth study involving site visits and interviews and the use of the *District Culture Scale*. The study identified seven categories of culture in student essays. Differences across grade levels and across districts in the frequency of these categories were determined. Statistical differences were found for three categories according to whether the district culture were rated as positive or negative, and whether students revealed a positive or negative view of their schools. Statistically significant predictors for writing achievement were found for three of the culture categories. This study confirms Kanter's notion that a Culture of Pride fosters a Climate of Success. Further, it suggests that district culture has a noticeable effect on school culture and is felt in the lives of students.

## **BACKGROUND**

In this study, culture is viewed broadly as a body of solutions to external and internal forces that have evolved over time as the “correct way to perceive, think about, and feel” in relation to these forces (Schein, 1985). In their 1982 compilation of research on school culture, Purkey & Smith substantiate how culture contributes to the overall effectiveness of schools, including achievement. In Codianni and Wilburn’s 1983 review of seventeen studies of effective schools, positive school culture was a theme. In most of the literature, culture, and the related area of climate, are addressed in terms of effects on schools, such as in the correlates of Effective Schools (Edmonds, 1979; Lezotte and Bancroft, 1985). The current study expands the arena of culture by looking at features beyond the school level. It draws upon the professional literature in education and in organizational development that credits the role of positive culture in developing effective systems (Deming, 1991; Elmore, 1992; Kanter, 1983; Parish, & Aquila, 1996; Hoy, et. al 1990).

Most studies since the 1960s purport that a positive educational culture includes, among other things: 1) respect and trust in teachers and students (Johnson, et. al, 1996; Kelly, 1999); 2) sense of belongingness to the organization (Fieman-Nemser & Floden, 1986; Kanter, 1983; Osterman, 2000; Roeser et al., 2000); 3) support for adult as well as student learning, especially ongoing professional development (Darling-Hammond, 1996; Elmore, 1992, 1996; Heck & Marcoulides, 1996; Little, 1993; Mortimore, 1991; Pritchard & Marshall, 2002; Teddlie & Stringfield, 1991); and 4) a collaborative learning and working environment (Leithwood et. al, 1991, 2001; Little, 1982; Rosenholtz, 1989).

The current study uses Owens' (1995) definition of culture, one that recognizes that there are multiple cultures within an organization. In this study, the researchers call the overarching positive culture a Culture of Pride, based on Kanter's research (1983) on organizational development in corporations where she found that "a culture of pride fostered a climate of success." (p. 149). In Kanter's definition of a Culture of Pride "...there is emotional and value commitment between person and organization: people feel that they 'belong' to a meaningful entity and can realize cherished values by their contributions." (p. 149). She explains that a Culture of Pride is manifest in activities and endeavors that are integrative, focusing on the wholeness of the enterprise. Specifically, the researchers investigate the components of culture that have enough impact on students that students bring them up as examples when writing about their schools, and whether or not the culture of the school is indicative of the culture of the district as a whole. As a path to understanding district culture, the perceptions of students are explored to see if they represent the norms, assumptions and beliefs (the culture) of the larger district. Further, to see if a Culture of Pride does indeed foster a Climate of Success, this study compares the writing achievement of students in positive culture and negative culture districts. Thus, the purpose of the study is threefold: to build a rich description of school culture based on student voices; to determine the relation, if any, between district culture and school culture as described by students; and to determine the relation between culture and student achievement

## METHODS

This study was embedded within a larger study of the characteristics of districts that had successfully implemented a nationally disseminated teacher-led staff development program in

writing (see Marshall, Pritchard, & Gunderson, 2001; Pritchard and Marshall, 2002). The researchers made site visits, averaging 5 days in length, to 18 randomly selected school districts in the U.S. drawn from a national sampling frame consisting of over 1,500 sites which had participated in the same teacher-led staff development initiative. The researchers collected over 400 hours of interviews from trainers, teachers, principals, central office administrators, and others who might shed light on system characteristics which support or impede a Culture of Pride. Compositions written on the topic of their schools were collected from more than 2,000 students in randomly selected classrooms in grades 4, 8, and 11.

### **District Culture Scale**

The research required an instrument which would be applied not as the route to gathering data, but as a way to analyze extensive data already gathered—in the form of interview transcripts, documents, site visits, and student writing. The *District Culture Scale* (Pritchard & Marshall, 2002) assigned the most positive scores to districts where: 1) personnel are doing the right things for kids; 2) personnel are focusing on problem-solving within the school or district structure; 3) the pattern of leadership most evident across the district is collaborative, facilitative, and consultative; 4) a positive level of trust and relationship exists between central office and the schools; and 5) positive communication and cooperation among teachers and administrators are evidenced.

Working independently after all site visits were made, each researcher rated the districts according to the 10-point District Culture Scale. The correlation between these ratings was .91 ( $p < .01$ ).

### **Essay Prompt**

The writing prompt asked students to write to a friend explaining why s/he should come to their schools. The prompt was personal, yet in the expository mode, and applicable to writers at the various grade levels. Younger students tended to choose a letter-to-a-friend format, while older students presented reasons. This topic turned out to be informative when students cited negative features of their schools in spite of being prompted to mention positive.

### **Sampling for Coding for Cultural Features**

Across districts, students in three grade levels were asked to contribute comments in writing about their schools, with a focus on the positive. Two classes in each school were randomly selected for assessment resulting in 2,275 essays representing 62 schools in 18 districts. For determining the original categories of cultural features that students mentioned, all 2,275 essays were read.

However, for detailed coding and rating of comments, a tiered sampling procedure was used. Districts were classified by the researchers as having a high/positive (combined score of 12-20) or low/negative (combined score of 0-8) district culture based on the *District Culture Scale*. This resulted in 1,973 students from 14 districts and 51 schools (23 schools in districts classified as having high/positive district culture, and 28 schools in districts having low/negative district culture).

Next, essays were numbered by grade level across all districts. A table of random numbers was used to determine which essays would be selected from each grade level, in order

to yield a 20% sample. This resulted in 248 essays from students in 35 schools selected for in-depth coding and analysis. This included 135 essays from high/positive culture districts, and 113 from low/negative culture districts.

### **Coding for Cultural Categories**

After training in identifying the seven content categories, two raters working independently coded the essays for the occurrence of each category, highlighting the features in different colors for each category. They also recorded whether or not the highlighted references were negative, neutral, or positive and assigned a score of 1 for negative, 2 for neutral, and 3 for positive. Finally, they assigned an overall numerical rating of the writer's representation of his/her school as negative (1), neutral (2), or positive (3). The inter-rater agreement for identifying the content categories and for determining whether the references were positive or negative was very high (96%). This was expected because most references were explicit and did not require interpretation.

### **Determining Student Achievement in Writing**

After four districts with middle ratings for district culture were eliminated, 1,973 student essays were determined to represent high and low culture districts. These were evaluated for writing quality using a 6-point scale created and piloted with a group of National Writing Project teachers representing the three grade levels sampled. Eighteen anchor papers were identified to represent points on the rating scale (6 points on three grade levels). Two raters working independently determined ratings for each paper. In cases where scores varied by more than

one point, a third rater was used. All scores were recorded. The correlation for the two raters was .92.

## ANALYSIS

### **1. When asked to write positively about their schools, what do students mention?**

A rich description of the features of school culture that students mention in their essays was needed to address this question. Researchers used an analytic induction approach whereby themes and clusters were identified in the student essays. Two of the researchers, working independently, read all the essays and distilled seven content categories from the papers. Then, two educators trained in the content categories independently read and classified the number of occurrences of the categories in a representative sample of papers. Finally, a tally was made to determine the total number of comments made in each category by level and by district, and the number of students who provided an example of the category at least once in their essays.

The following seven cultural categories were determined to represent the content of the student essays: Social/People; Educational Climate and Programs; Codes and Rules; Extra-Curricular Activities; Physical Facilities; Location/Community; Special References.

### **2. Are there differences across grade levels or districts about what students mention?**

Students at all levels comment on similar things, and the category references are significantly different from each other ( $F = 13.84$ ,  $df = 5/35$ ,  $p < .01$ ). Across all essays, the percentage of comments in each category are as follows: Social/People = 30.90%;

Extra-Curricular Activities = 18.65%; Education/Curriculum = 17.73%; Physical Facilities = 16.13%; Codes and Rules = 9.37%; Location/community = 7.16%

Significant interactions between levels indicate that some patterns are not random ( $F = 2.84$ ,  $df = 10/70$ ,  $p < .01$ ). In terms of ranking of comments, students at all levels mentioned social elements more than any other category. However, after that, the rankings vary. Social elements followed a pattern indicating that they are more important to elementary students ( $M = 24.48$ ) than to middle school students ( $M = 19.62$ ) and to high school students ( $M = 18.59$ ). In fact, Social elements comprise 35.8% of all comments made by elementary students. Education/Curriculum seems of great importance to elementary students ( $M = 14.55$ ), and drops for middle school students ( $M = 10.22$ ) when middle school students make more Social comments ( $M = 19.62$ ) than other types of comments. Similarly, high school students make fewer comments about Education/Curriculum ( $M = 11.10$ ) than do elementary students, but more than middle school students.

### **3. How does the nature of students' comments—as positive or negative about their schools—vary according to level or district?**

This analysis was done to account for individuals who might have made multiple comments in one category and thus elevated the means reported above. Significant differences by category in the number of students making positive or negative comments about their schools were found. For three of the categories, students in high/positive culture districts made significantly more positive comments than those in low/negative districts: Social/People ( $t = 3.07$ ,  $df = 154$ ,  $p < .05$ ), Education/Curriculum ( $t = 4.14$ ,  $df = 97$ ,  $p < .01$ ), and Extra-

curricular Activities ( $t = 2.42$ ,  $df = 98$ ,  $p < .05$ ). There were no significant differences in the categories of Codes/Rules, Physical Facilities, Location/Community, and Special References.

#### **4. How does the nature of student comments relate to the overall culture of their school districts?**

The purpose of this part of the research was to determine if there were a relation between features of the school culture that students mentioned in their essays, and cultural features that researchers identified in the district as a whole using the *District Culture Scale*. To address this question, researchers did a causal comparative analysis whereby the cultural features that randomly sampled students mentioned were classified as either mostly positive or mostly negative. The independent variable was the cultural level of the district. Using  $t$ -tests, the positive and negative ratings were then compared with the culture ratings for the districts from which the random samples were derived.

The difference between positive and negative student comments and district culture was significant for three of the six categories: Social/People ( $t = 2.81$ ,  $df = 194$ ,  $p < .01$ ), Codes/Rules ( $t = 2.18$ ,  $df = 70$ ,  $p < .05$ ), and Education/Curriculum ( $t = 2.60$ ,  $df = 117$ ,  $p < .05$ ). For these categories, there was a significant relation between the *District Culture Scale* ratings supplied by the researchers and the ratings of the comments that students made in their essays. There were no significant relations with District Culture for Extra-curricular Activities, Physical Facilities, Location/Community, or Special References.

#### **5. How does the nature of student comments relate to overall writing achievement?**

Since the common denominator across districts used in this study was staff development in writing, achievement was assessed based on student writing samples. Two kinds of analyses were used to determine the relation between students' written comments, district culture, and overall writing achievement. Using a group by level ANOVA, the first analysis compared all the essays from the seven districts showing high/positive district culture with all the essays from the seven districts showing low/negative district culture, based on the district culture assignments made by the researchers.

The group main effect was significant ( $F = 43.94$ ,  $df = 1/1967$ ,  $p < .01$ ), as was the level result ( $F = 61.67$ ,  $df = 2/1967$ ,  $p < .01$ ). The level effect verifies the expected grade level changes showing growth from grade 4 ( $M = 7.39$ ) to grade 11 ( $M = 8.39$ ). The results show no district culture effect on student writing achievement at the elementary level, but significant effects ( $p < .01$ ) on achievement at the 8<sup>th</sup> and 11<sup>th</sup> grades. By grade 8, the group effect indicates that the students in the high/positive culture districts — also those districts most likely to have students writing positively about their schools — displayed higher writing achievement levels ( $M = 8.40$ ) than did students in low/negative culture districts ( $M = 7.75$ ).

Essays that raters coded as showing mainly positive attitudes about schools were compared in a second analysis with essays that raters coded as showing mainly negative attitudes, based on the content in the student essays.  $t$ -tests were used to analyze the relation between positive-negative classification of students' essays and their writing achievement scores. The scores for essays rated as creating an overall positive picture of schools ( $M = 8.22$ ) were significantly higher than for essays rated as negative ( $M = 5.74$ ) ( $t = 5.41$ ,  $df = 246$ ,  $p < .01$ ). Next, an analysis for each cultural category was made in relation to student

achievement. For all cultural categories, the positive students obtained the higher mean writing achievement scores. The difference was significant for three of the six categories:

Social/People ( $p < .01$ ), Education/Curriculum ( $p < .05$ ), and Extracurricular Activities ( $p < .01$ )

## DISCUSSION

This discussion will focus on the three cultural arenas that seem to exert the greatest impact on student satisfaction and achievement. This study shows that across all types of districts (rural, urban, small town) and across all grade levels, students notice and comment most on Social/People (30.90% of all comments), Extra-curricular Activities (18.65%), and Education/Curriculum (17.73%). Elementary students seem the most invested in the social and educational aspects of school as compared to students at other levels. In the categories of Social/People, Extra-Curricular Activities, and Education/Curriculum, this study identified a significant relation between student positive or negative comments in their essays and district culture.

The data support a significant relation between these three features of culture and writing achievement, and between positive and negative comments made by students in these culture areas and district culture ratings. Significantly more students with higher achievement scores made positive comments about Social, Educational, and Extra-curricular Activities than did students with lower achievement scores. Furthermore, significantly more students in high/positive district cultures made positive comments in these three areas than did students in low/negative district cultures.

This study indicates that students in all districts, but especially in positive culture districts that have many other things working right for students, can show “voluntary conformity” in terms of academic and social behaviors. In positive school environments, students comply with adult rules and values out of respect for each other, trust in adults, or gentle pressure from rituals established through symbols of unity—such as a school bulletin board devoted to students’ projects or art work, or a nature trail developed by students, or pride in their principal, or a display case of athletic trophies.

In negative school environments, these efforts can backfire, as when students create their own symbols of unity that are distinct from the school’s. An obvious example is school gangs, but other less overt examples can be shown in how students egg on their peers to get the teacher to cancel a test or in how students simply become apathetic in school even if they are not acting out. The problems of maintaining order are exacerbated in law-and-order schools that try too hard to control students through rigid rules, that establish inordinately high consequences for minor disturbances, or set very stringent dress codes. Several studies (Powell et al., 1985; Steinberg et al, 1996) of why school reform efforts have failed report that:

...a very large proportion of U.S. students are not primarily oppositional but simply disengaged from the academic purposes of school or just going through the motions. School culture includes norms of minimal cooperation with adult preferences and expectations about purpose and effort. (cited in Firestone & Louis, 1999, p. 308)

According to Mertz’s study of high schools (1978), as summarized by Firestone & Louis (1999), “Where students perceive ineffective coercion, they are even more likely to create an oppositional, disruptive culture.” (p. 308). The important word here is ineffective. In positive school cultures, students are more likely to voluntarily comply with school rules and adult values

because the methods are effective, and the learning is engaging enough that they take it seriously. It becomes the norm to be content with school.

## CONCLUSIONS

In positive cultures, students in this study shared a Culture of Pride in the learning of the group and not just in individual achievement. Pride and ownership were themes uniting students in schools and districts with positive cultures. They showed pride in all the categories of this research: people, educational activities, behavior, extra-curricular activities, physical facilities, and community.

Across all grades and communities, teachers were mentioned in abundance, in both negative and positive terms. Firestone and Louis point out that a number of studies “suggest that teachers, rather than administrators, are the primary bearers of school culture, assuming a minimally competent principal” (p. 317). In this study, this was not true of positive school districts where administrators were mentioned in abundance and frequently in positive terms, especially by elementary students. In negative school districts, however, researchers noted that teachers often acted as buffers between students and a weak or negative principal.

In this study, we found that kids are more like other kids than they are differentiated as rural kids, or city kids, or poor kids, or affluent kids. Nearly every elementary student mentioned the good and bad of school lunches; middle school students wrote about their peers; high school students mentioned sports and life after graduation. The most strident differentiating factors distinguishing positive culture and negative culture were in the areas of Social/People, Educational Environment, and Extra-Curricular Activities. Positive attitudes in these categories

provided the best predictors for student achievement. Moreover, these areas of school culture are intricately bound and directly related to district culture.

Finally, this study validates the use of student voices as a vehicle for assessing school and district culture. In this study, comments from randomly sampled individual students were used as one of several dimensions of district culture, the others being on-site visits, document analysis, student achievement, and interviews. In this study, a direct causal relation cannot be claimed that individual students are aware of district influences on their daily lives; however, conceptually the issues facing students also face teachers and administrators and districts, at least in the three culture categories found to have significant relation to district culture:

Social/People, Codes/Rules, and Education/Curriculum. Although schools certainly create their individual cultures, this study suggests that school cultures are bound by district cultures, and positive and negative features of the district as a whole are felt by individuals in schools in the district.

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