TeamMates: A Model to Support Mentoring in Rural Schools

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Mentoring relationships have proven to provide benefits to youth and are expanding rapidly into schools. There was concern whether or not the economic and demographic issues of rural communities and schools would limit success of mentoring programs in rural schools. This study focuses on TeamMates, a state-wide, school-based, one-to-one, adult-to-youth mentoring program which includes extensive support for program implementation and ongoing operation. The program was effective in rural schools in demonstrating positive perceptions of change in students' behavior as reported by students, parents, teachers, and mentors. Rural and nonrural groups' perceptions of change were at least average and above. Rural and nonrural groups perceived the program in a similar manner. Rural communities and schools were able to provide mentors and staff to support program implementation at a rate that surpassed nonrural schools. Needs for future research and resources for information for rural administrators considering implementing a student mentoring program are shared.

"An Old Guitar"

A TeamMate mentor in rural Nebraska had been meeting with his youth TeamMate for most of the school year. The man, who plays in a band, had been giving his mentee guitar lessons, which the boy seemed to enjoy. Since TeamMates are discouraged from giving gifts, he had loaned the boy one of his old guitars as long as the boy gave his best efforts in school. As time passed, the boy's effort in school declined and his grades plummeted. After lengthy soul searching, the TeamMate shared with the boy that, perhaps, he was not able to do for the boy what was needed and that, maybe, someone else could reach and inspire him. He also said that according to their arrangement, the boy would need to return the guitar. Some time later the man took out the old guitar to take on an outing and found a note in the case from his mentee that said "don't give up on me."

The TeamMate called the boy and told him that he valued their relationship. They corresponded over the summer and resumed their mentoring relationship the next fall. While the mentor takes no credit for the change, the boy's mother responds that her son is attending school more, completing homework, and getting better grades. The mentor states that "good or bad, if something has happened, he calls to share that with me . . . I believe in the TeamMates Mentoring program . . . and I'm glad that old guitar brought the two of us back together."

(TeamMates Newsletter, 2001)

Introduction

There is growing body of research documenting positive effects of mentoring programs with youth. In personal/social growth areas, students who have participated in a mentoring program are reported to have experienced a reduction in: alcohol and drug use (Jekielek, Moore, Hair, & Scarupa, 2002; Tierney & Grossman, 1995); likelihood of becoming a teen parent (Jekielek et al., 2002; Mecca, 2001); incidence of hitting and violence towards others (Jekielek et al.) and likelihood of joining a gang (Mecca). They have also shown improved relationships with others in general (Tierney & Grossman, 1995) and with peers, adults, and parents specifically (Curtis & Hansen-Schwoebel, 1999). They were more able to express feelings and had increased self-confidence (Curtis & Hansen-Schwoebel). In relationship to school, they showed an improved attitude towards school (Curtis & Hansen-Schwoebel; Jekielek et al.); fewer absences (Curtis & Hansen-Schwoebel); better grades (Curtis & Hansen-Schwoebel; Tierney & Grossman); and were less likely to repeat grades (Curtis & Hansen-Schwoebel). They were more likely to stay in school (Mecca) to graduate and enroll in post high school training and education and more hopeful about the future (The Mentoring Institute, 2001).

There are many types of mentoring programs in K-12 public schools, community agencies and organizations, and higher education settings (Guetzloe, 1997). Manza (2001) reported that approximately 39% of the mentoring programs
in the United States are community-at-large-based; 29% are school-based; 19% are community-organization-based; 2% are faith-based; 2% are business-based; and 1% are email-based. She further stated that while 15.7 million young people want or need mentors, only 500,000 to 700,000 currently have them. From 1996 to 2001, there has been a 40% growth in mentoring programs. Seventy percent of that growth is in school-based programs. Sipe and Roder (1999) reported that newer programs are smaller, 80% having fewer than 50 students and only 12% having more than 100 students. While research supports the benefits of mentoring, and there has been growth in numbers of programs, many of these programs tend to serve small numbers of students.

There is a need for programs with the organizational resources and structure to provide the needed mentors to reach significantly more youth (Grossman & Garry, 1997; Manza, 2001). This could best be met by developing programs that serve more students in school settings. The National Mentoring Center (2001) has described “The Top Ten Reasons Why Agencies Should Begin School-Based Mentoring Programs” providing evidence to support the likelihood of growth in school-based mentoring programs. This has been adapted by the authors as:

1. School is where youth are.
2. A teacher may refer youth who may not be referred by parents.
3. School-based mentoring attracts volunteers who may not be comfortable in community-based programs.
4. School-based mentoring programs are more cost-effective than community-based programs ($556 per match vs. $1,543).
5. Cross-gender, cross-racial and intergenerational matching can occur more comfortably in the controlled school setting.
6. School-based programs have established processes for public information and, therefore, increased opportunities of finding volunteers and gaining financial support from the community.
7. Schools provide a hub for partnerships from the larger community including: business and industry (facilitating adopt-a-school or other programs in which employees are given paid time to be in schools), other schools and colleges, community organizations, churches, retirement homes, public sector volunteers and general community volunteers.

There is concern with any school intervention whether it will work in all settings, in this case, rural communities and schools. Herzog and Pittman (1995) described rural communities as having higher unemployment and a lower median family income as compared with metropolitan areas. Rural areas are also described as having an increased proportion of elderly residents (Herzog & Pittman, 1995; Hobbs, 1994; Stern, 1994) and women more likely to be working outside the home than in the past (McGranahan, 1994). From 1976 to 1986, poverty rates have increased twice as fast for rural areas than metropolitan areas (Stern). Herzog and Pittman further described a “bitter harvest” (p. 1)—those rural individuals with more education moving to the larger communities, further aggravating these problematic conditions.

While economic and demographic information points to a somewhat discouraging portrait of rural communities, many of those living there would describe them much differently (Kannapel & DeYoung, 1999). The characteristic most often described by rural residents of their rural life is attachment to place (DeYoung, 1995; Howley & Howley, 1995; Seal & Harmon, 1995; Theobald, 1997). Other positive attributes of their communities as described by rural residents include primacy given to people and relationships (Haas & Lambert, 1995; Haas & Nachtigal, 1998) and importance of the family (Nachtigal, 1982; Seal & Harmon). In a survey contrasting how rural and urban Americans view their communities, Seebach (1992) reported that rural Americans identify themselves as having a commitment to community and providers quality of life for children.

Herzog and Pittman (1995) described problems of rural schools compared to metropolitan schools as being staffed with younger, not as well-educated, and less experienced teachers. Leaders receiving lower pay and benefits administer them. Retention of staff is a persistent problem and teachers teach a wide range of subjects in and out of their certified area (Beeson & Strange, 2000). Rural schools suffer persistent financial stress often aggravated by consolidation efforts, fewer facilities, fewer curriculum offerings, particularly in advanced course work, and experience a generally negative “country” attitude. However, rural schools are described as having a strong sense of community and being the culture and social center of the town (DeYoung & Lawrence, 1995; Dunne, 1977; Herzog & Pittman; Larsh, 1983; Nachtigal, 1982; Seal & Harmon, 1995; Stern, 1994).

A student mentoring program is dependent on the community for volunteers to serve as mentors and to provide financial support and for a school staff with the time and interest to operate a mentoring program. There is concern whether rural community and school economic and demographic concerns would prevent a student mentoring program from succeeding.

**Purpose of the Study**

The purpose of this study was to determine whether the economic and demographic issues of rural communi-
ties and schools would limit the success of the TeamMates mentoring program. The following research questions were addressed: Will there be a positive perception of rural student change? Will the perception of student change be significantly different for rural versus nonrural groups? Are rural schools able to implement mentoring programs at the same rate as nonrural schools?

Research Design and Methodology

Definition of Rural

There are several definitions of “rural” that are used in educational research (Beeson & Strange, 2000; Khattiri, Riley, & Kane, 1997). For the purposes of this study, classification of rural schools was based on Locale Codes as described by Johnson (1989). The Johnson Codes are developed specifically for use with schools. Codes range from one through eight, with seven and eight described as rural schools, those in communities or rural areas with less than 2,500 population. Nonrural schools were one through six in Johnson Locale Codes. Locale Code assignment for the participating districts was taken from the National Center for Educational Statistics Common Core of Data (2002). Of the 33 schools in the study, 10 were identified as rural; 23, as nonrural.

Program Studied

This study was carried out with the TeamMates program, a mid-western state-wide, school-based, one-to-one mentoring program. TeamMates was initiated very informally in the 1991-1992 school year by the football coach at a state university asking for players to volunteer to mentor local youth. Twenty-five student athletes volunteered to mentor seventh and eighth grade students in a large nonrural school district. The program operated informally and grew slowly until a grant was obtained in 1999 to develop the program into a formal statewide model. By the time of this study in the 2000-2001 school year, there were 1,490 students from 33 school districts, 10 rural and 23 nonrural, participating in the TeamMates program. The program serves students in communities from all parts of a geographically large state, one program being 425 miles from the TeamMates office.

The TeamMates structure includes a state advisory board, executive director, and four regional coordinators who work with geographic areas and/or large districts. Building programs have a program coordinator. The state office provides each local program with the TeamMates Program Management Manual (The Mentoring Institute, 2001), which provides the information needed to initiate and the ongoing technical assistance to operate a student mentoring program. Since the program’s inception, it has focused on controlled expansion to ensure community commitment, adequate resources to sustain the program, and mentors to facilitate delivery of the program. Local districts sign an agreement regarding their commitment and capacity to support the program.

TeamMates involves adult mentors meeting with students once a week for approximately one hour during school time. The primary tasks of a mentor are to establish a positive, personal relationship with the student; help the student develop life skills; assist students in obtaining additional resources; and help students in their ability to interact with others. The program works with students beginning in early middle school through high school completion, with the goal of post-high school training/education. There is assistance in identifying funds to provide financial assistance for post-high school education and training. Background checks are completed for all mentors, and training is provided to them prior to matching them with students who are referred by school staff. Coordinators provide ongoing support and monitoring of the program in keeping with the TeamMates Program Manual (The Mentoring Institute, 2001). The program has demonstrated positive perception of change in student behavior as rated by students, parents, teachers, and mentors (Isernhagen & Dappen, 2001).

Sample

Of the 1,490 student/mentor matches, there was at least one survey (student, teacher, mentor, or parent) returned from 1,169 (78%) of them. A total of 2,501 (42%) of the surveys were returned; two were not identified with a district and not included in analyses. Surveys were received from 767 (51%) students, 878 (59%) teachers, 586 (39%) mentors, and 268 (18%) parents. In the 2000-2001 school year, there were 288,261 students enrolled in Nebraska public schools (Nebraska Department of Education, 2001). Of this number, 166,687 (58%) were in schools that were participating in the TeamMates Program. Of the districts participating in TeamMates, 4,423 students (3%) were in rural schools; 153,581 (97%) were in nonrural schools.

Procedure

A survey procedure was used to collect data from the 1,490 students participating in the TeamMates program and their parents, mentors, and teachers (English/Language Arts). Students were in grades 6 through 12. Surveys were mailed in April 2001 to the TeamMates coordinator within the 33 participating schools. Prior to this, information regarding surveys had been shared at state and regional TeamMates meetings. The coordinator distributed, collected, and returned the surveys. Following distribution of surveys, program coordinators reminded the students, teach-
The Mentoring Change Scale was adapted from a Big Brothers/Big Sisters of America (2001) survey used to evaluate their mentoring program. The instrument was developed to measure student behavior change as a result of participation in the TeamMates mentoring program. The scale contains 21 items in the areas of personal/social competence, caring/respect, and future aspirations. Examples of items in these areas are “self-confidence,” as personal/social competence, “shows trust towards you,” as caring/respect, and “academic performance” as future aspirations. For clarification, definitions of terms used were included on the back of the scale. Respondents were asked to rate change in student behavior observed over the past year as the student had participated in the TeamMates mentoring program. The scale used a 5-point Likert format for each item, asking respondents to report change in students behavior with 1 representing “Very Good;” 2, “Good;” 3, “Average;” 4, “Below Average;” and 5, “Very Poor.” Respondents could also mark a “Don’t Know” category. Coefficient alpha scores for the Mentoring Change Scale are .90 for students, .96 for teachers, .92 for mentors; and .93 for parents (Isernhaegen & Dappen, 2001).

Data Analyses

Analysis of variance was conducted to determine rural total mean scores as well as for comparing rural and nonrural students, teachers, mentors, and parents. The dependent variable was computed separately for students, teachers, mentors, and parents and consisted of the mean across all of the items for which the respondent provided a score of between “1” and “5.” Respondents who skipped or responded “Don’t Know” to one or more items were not included in the computation of the total scale mean. A significance level of .0125 was used based on the .05 level with Bonferroni correction for the number of tests run.

A further comparison of rural and nonrural groups was conducted by obtaining the Spearman correlation of the rank order of items by mean Likert score. For example, the rank order of items for rural students was correlated with the rank order for nonrural students; the same was done for rural teachers and nonrural teachers, rural mentors and nonrural mentors, and rural parents and nonrural parents. All responses to an item were included in computation of the item mean.

Level of implementation in rural versus nonrural schools was gained by comparing the total mentor/student matches percentage difference in rural versus nonrural schools with the total student population percentage difference in rural versus nonrural schools. Information on the number of matches in districts was obtained from the TeamMates of Nebraska state office, as reported by regional and school district coordinators.

Results

Perceptions of Rural Participants

Perceptions of rural participants were based on Mentoring Change Scale total mean scores from students, teachers, mentors, and parents. Of the 120 student/mentor matches in rural schools, surveys were returned from 73 (61%) students, 105 (88%) teachers, 76 (63%) mentors, and 56 (47%) parents. As shown in Table 1, total scale mean Likert scores (with standard deviations in parentheses) of perception of student change as a result of participating in the mentoring program by rural students was, 2.14 (.51); rural teachers, 2.86 (.78); rural mentors, 2.66 (.67); rural parents, 2.29 (.56). All groups of rural respondents perceived student behavior change average or above.

Differences Between Rural and Nonrural Participants

The first approach to examination of differences between rural and nonrural participants was also based on total scale mean scores of students, teachers, mentors, and parents. Of the 1,370 student/mentor matches in nonrural schools, surveys were returned from 564 (42%) students, 685 (50%) teachers, 413 (30%) mentors, and 181 (13%) parents. Table 1 provides a comparison of the mean Likert scores (with standard deviations in parentheses) for rural and nonrural participants. As reported in Table 2, one-way analysis of variance (ANOVA) indicated a statistically significant difference (using alpha = .0125, based on the previously described Bonferroni correction) between the rural and nonrural students. The effect size (eta squared) of the mean score difference for students was .022; teachers, .002; mentors, .002; and parents, .005. This difference would best be described as small, based on .01 being described as small, .06 as medium, and .14 as large (Cohen, 1988). There were no statistically significant differences between total scale mean scores of rural and nonrural teachers, parents, or mentors.

A second approach to compare differences between rural and nonrural groups was to examine the Spearman correlation coefficient for the rank order of individual items by item mean Likert scores. The correlation coefficient for rural and nonrural students was $r = .853$; for rural and nonrural teachers, $r = .825$; for rural and nonrural mentors, $r = .897$; and for rural and nonrural parents, $r = .906$. All correlations for rank ordering of individual items for rural and nonrural groups were significant ($p < .001$).
Implementation in Rural and Nonrural Schools

At the time of this study, 120 (8%) of the total TeamMates student/mentor matches were in rural schools; 1370 (92%) were in nonrural schools. Students in rural schools represented 3% of the total student population, students in nonrural schools 97%. There was a higher percentage of matches in rural schools than their percentage of total student population.

Discussion

Rural students, teachers, mentors, and parents' perceptions of student behavior change as measured by Mentoring Change Scale total mean scores following participation in the TeamMates mentoring program were generally higher than in nonrural students. This bodes well for rural schools that may be considering implementing a mentoring program. Rural communities and schools, regardless of real or perceived economic and demographic concerns, can implement mentoring programs that are perceived to result in positive change in students lives.

In examining rural versus nonrural groups on Mentoring Change Scale total mean scores, there were no significant differences between teachers, mentors, and parents. Rural students were significantly less positive than nonrural students. While one may speculate that rural economic and demographic conditions may contribute to this difference, it is tempered by the fact that differences were not found between the other rural and nonrural groups. The significance of this student difference is further tempered by the finding that the effect size of this difference would be described as "small" (Cohen, 1988).

The Spearman Rho correlation coefficients of the rank ordering of items for rural and nonrural students, teachers, mentors, and parents were all significant. Even rural students, who were significantly less positive on the total mean score than nonrural students, were not significantly different in their rank ordering of items. This would indicate that rural and nonrural groups viewed individual items of student behavior change in a similar manner, regardless of any differences in total scale mean score comparisons.

In an examination of ranking of specific items some important information was identified. The item "shows trust toward you" was a highly rated item (no lower than sixth) for any of the groups. This would indicate the formation of relationships based on trust, which is viewed as the basis for successful mentoring relationships (Herrara, 1999). The two items "academic performance" and "school preparedness," that were in the lowest five rated items for all groups, may reflect that while all participants indicate that students have made progress, these are still relative areas of concern. As a school-based program, there may be higher expectations on items related to school than might be present in another setting.

Rural schools were able to find staff and mentors, which resulted in a higher percentage of matches than nonrural schools as compared to the percentage of student population participating in the TeamMates program. Students in rural schools represent 3% of the student population yet accounted for 8% of the student/mentor matches; students in nonrural schools represent 97% of the student population and 92% of the student/mentor matches. The TeamMates program structure and support and/or the positive aspects of the rural school and community (Herzog & Pittman, 1995; Seebach, 1992) may be the basis for the successful expansion of the program in rural schools. This finding may also mean that rural communities and schools are really not that different from nonrural communities and schools. Regardless of the reality and impact of the "rural school problem" (Kannapel & DeYoung, 1999), the program was successfully implemented in rural schools at a higher rate than in nonrural schools.

There are some cautions regarding the interpretation of these findings. While the percentage of students in schools involved with TeamMates is representative of the percentage of rural students in the state, the reality of low numbers of students in rural schools results in a substantial discrepancy between the number of rural and nonrural students in the analyses. There is also the concern that differ-

Table 1
Mean Scores and Standard Deviations for all Groups in Rural and Nonrural Settings

<table>
<thead>
<tr>
<th></th>
<th>Student</th>
<th></th>
<th>Teacher</th>
<th></th>
<th>Mentor</th>
<th></th>
<th>Parent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Rural</td>
<td>73</td>
<td>2.14</td>
<td>(.51)*</td>
<td>105</td>
<td>2.86</td>
<td>(.78)</td>
<td>76</td>
<td>2.66</td>
</tr>
<tr>
<td>Nonrural</td>
<td>564</td>
<td>1.88</td>
<td>(.55)</td>
<td>685</td>
<td>2.97</td>
<td>(.85)</td>
<td>413</td>
<td>2.54</td>
</tr>
</tbody>
</table>

*p < .0125
Table 2
Analysis of Variance for Rural and Nonrural Groups

<table>
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<tr>
<th>Variable</th>
<th></th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Between groups</td>
<td>1</td>
<td>4.263</td>
<td>14.097*</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>635</td>
<td>.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>Between groups</td>
<td>1</td>
<td>1.074</td>
<td>1.517</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>788</td>
<td>.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentors</td>
<td>Between groups</td>
<td>1</td>
<td>.962</td>
<td>2.398</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>487</td>
<td>.401</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>Between groups</td>
<td>1</td>
<td>.235</td>
<td>.538</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>235</td>
<td>.438</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .0125.

ences between rural and nonrural students may be due to other confounding factors, such as socioeconomic level, rather than a difference in the effectiveness of the mentoring program in rural and nonrural schools. There is the possibility that mentoring change ratings from respondents may differ from those program participants who did not respond to the survey.

Of further note is that while the success of the program might be based on the support the program provides, there is also the possibility that at least part of this success is based on the notoriety of the program founder who is president of the state advisory board, a former college football coach, and current congressman. Focus groups at the first statewide conference recognized this possibility (Dappen & Isernhen, 2001). While this fact may relate to statewide support and involvement in the program, it would have little effect on differences between rural and nonrural populations.

Implications

Rural school administrators who are considering implementing a mentoring program should feel encouraged. While there may be economic and demographic concerns unique to their communities and schools, programs such as TeamMates (www.teammates.org) provide support to enable implementation of successful student mentoring programs. Information regarding mentoring can be obtained at the National Mentoring Center (www.nwrel.org/mentoring). Information regarding states which have a mentoring partnership support network established and other general resource information can be obtained from the National Mentoring Partnership (www.mentoring.org).

Regarding future research implications, there is a need for longitudinal research to determine the success rate of students in rural and nonrural settings over multiple years. This would include study of student participation and success in post high school training/education. Further research should also explore the differences found between rural and nonrural perceptions of student change by students.

The rural population will likely continue to decline. This may exacerbate problems identified with rural communities and schools. There will, therefore, be a need for research to identify the specific aspects of mentoring programs that enable them to succeed in rural areas. A related but more general research need is to examine the reality and impact of the "rural school problem" (Kannapel & DeYoung, 1999), as related to the more positive effects of rural communities and schools described by Herzog and Pittman (1995) and Seebach (1992).

Congress included $100 million in its proposed education budget for student mentoring and $17.5 million was approved. This is evidence of support for growth in school-based student mentoring programs. TeamMates provides a model that enables rural schools to successfully participate in this growth.

References


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