

The effects of grandparent volunteers on student reading achievement and attitudes.

Brian Martel

Eastern Connecticut State University

June 26, 2008

Introduction

In today's economy it is becoming more and more difficult for single income families to exist. Many parents cannot afford to or are not employed in a situation that allows them to take time off from work to volunteer in classrooms during school hours. Jeter-Twilley (2007) found that there was a significant difference in parental involvement by socio-economic status. Not only did lower SES schools lack involvement they had lower standardized test scores. Why is that a problem?

In a study by Porter DeCusati and Johnson (2004), parent volunteers had a significant effect on student achievement in early literacy. The student's also reported feeling positively about the parents' involvement whether it was their biological or a peer's parent. Hung (2007) reports that, students are achieving more academically as a result of Taiwan's educational reform, which encourages parental involvement. The educational system we are working within in the US is more focused on testing than parental involvement. There is hope though, Oyserman (2007) concluded that an intervention program to buffer the negative effects of low parental involvement can lead to more school focused students and higher academic achievement.

The research questions being asked by this proposal are whether or not grandparents volunteering in the classroom effect student achievement in reading, and whether or not students have positive attitudes toward grandparent volunteers.

Fenzel (2006) speaks to the effectiveness of volunteer teachers with competent mentors versus those without. Though the population in that study is different, it is an important question. To determine if the same data holds true in this instance our study

will also ask if a teacher-grandparent mentoring program has an effect on their involvement.

If a grandparent volunteer program is effective, as this proposal hypothesizes, then educators and students could have volunteers that positively effect achievement without further straining the economy of their families.

Review of the Literature

Hung (2007) researched the parental involvement component of the educational reform in Taiwanese primary schools. Each student involved completed two questionnaires and two academic achievement tests. The findings suggest that students' academic achievement were related to their immediate family learning environments and their perceptions of the classroom learning environments and parents' involvement. This study is limited because its population is different from that of the US. However, research presented in this proposal suggests that it is theoretically applicable to this study.

Back in the US, the findings of Porter DeCusati and Johnson (2004) add evidence that similar instances hold true in the US. Their research established the significance of parent volunteers in the classroom. In the study, parents in the research group participated directly with a small group of randomly chosen kindergarten children working on emerging literacy skills. The children were pre and post assessed using a test by the Wright Group (1996). The children were also interviewed using a 3 point Likert Scale to determine their attitude toward parent involvement. The results of the study indicated that inclusion in the parent research group was positively linked to emergent

literacy with respect to the recognition of sight words, but not upper and lower case letter recognition, when compared to their peers. The study also indicated that while children whose parents volunteered, felt unanimously positive about the experience, 85% of the remaining children had a positive attitude toward parent volunteerism.

The results of Porter DeCusati and Johnson's (2004) study might be skewed because the parents involved in the research group were allowed to participate without regulation in a number of activities with all the children, but only the reading group activities with children in the research group.

Jeter-Twilley, Legum, and Norton (2007) researched the impact of socio-economic status on parental involvement in schools. The study illuminated a dark correlation, there is a significant difference in parental involvement in lower SES/ high Free And Reduced Meals schools. The study included 5 schools with a white majority and 5 with a Black/Hispanic majority, though it was unclear the effect if any this had on the study's data. Although the discussion of the study admits more research is needed to understand what causes this phenomenon, this might suggest that parents are working during school hours and unable to volunteer in classrooms.

Whether employment is the case for few parent volunteers or not, Oyserman, Brickman, and Rhodes (2007) investigated lessening the impact on students with less involved parents, regardless of SES. The study implemented an elective where each session focused on school possibilities and selves. Parents were involved in only the last two sessions with structured activities to talk about strategies and selves. The study found that students who had completed the intervention whether with their parents or not, had similar grade point averages and teacher-rated behavior. The data also showed that

the intervention group had higher grade point averages and teacher rated behavior than the control group. This study suggests that an intervention can be effective.

One possible intervention was researched. Bird (2006) investigated the effects of an internet accessible student information system (SIS) on a population of 6000 students in 10 mid-west elementary schools. Students and parents had access to the students' attendance, grades, evaluations, and general activities. Bird reports that discipline reports are down and test scores are consistently above the national average instead of declining like in schools with similar demographics. Though promising, this research has two major flaws; the findings of this study are unsubstantiated by data, and the author is superintendent of the schools in the study.

One last study of significance addresses a concern of the Porter DeCusati and Johnson (2004) research referred to earlier, the study did not differentiate between volunteers who attended the encouraged training sessions and those who did not. Fenzel and Flippen (2006) investigated the effectiveness of volunteer teachers. The findings demonstrated that volunteer teachers who were mentored by a competent educational leader were more effective than those who were not. The training of effective techniques and structured learning activities similarly impacted the volunteer teachers' effectiveness. The findings were significantly positive for literacy but not to mathematics. While grandparents are not trained teachers, it would stand to reason that volunteer grandparents would be more effective under the same circumstances.

Research Questions and Hypotheses

This investigation will examine the effectiveness of a grandparent volunteer program focusing on developing kindergarten early literacy skills in small groups. The following research questions will be addressed with descriptive statistics:

- How did grandparent volunteer groups effect student achievement as measured by scores on the Dynamic Indicator of Basic Early Literacy Skills (DIBELS) assessments?
- Did the students have a positive reaction to grandparent volunteers as measured by a 3-point Likert Scale interview?
- Was there a difference in student achievement between the volunteer grandparent groups who were mentored by the classroom teachers and the volunteer grandparent groups that were not?

It is the hypothesis of this study that students in the mentored grandparent volunteer groups will score higher than the students in the non-mentored grandparent groups who will score higher than their peers on the DIBELS assessments. It is also hypothesized that the majority of students will view grandparent volunteers positively.

Significance of the Proposed Study

The findings of this study could significantly effect education, research, and communities. There are two particular trends in education that would be effected; the big push for academic achievement coming from No Child Left Behind, and what seems to be a relative decrease in educational funding. If grandparent volunteers can effectively assist teachers in developing skills in students, academic achievement would rise at a

very minimal cost to schools. These costs might include a recognition banquet or gift and periodic training sessions. In the school I currently teach in, volunteers are encouraged to attend in-house staff developments that are applicable to them, many times at no extra cost to the school. The findings of this study will also support current volunteer research as well as expand on the possibilities of volunteer demographics. By the nature of this study, students will share experiences with members of their communities that they might never have before, and vice versa.

Methods and Procedures

Research Design

The study uses quantitative design and methodology to address the research questions above. The correlational study will be used to show the relationship between student achievement and the grandparent volunteer program, student attitudes toward the volunteer grandparents, and the student achievement between the mentored and non-mentored volunteer grandparents. By conducting a quantitative study using DIBELS scores and a student survey it can be determined if grandparents are effective volunteers. Comparing the students' DIBELS scores between the mentored and non-mentored grandparent groups will determine the effect of mentoring on the volunteer grandparents' effectiveness.

Sample and Data Collection

The target populations of the study will be the kindergarteners of Pomfret Community School. Expected sample size is 61 kindergarteners of which 15 receive

special education services. Both convenience and random sampling technique will be used in the study to make three groups in each of three classrooms: a control group, a group with a non-mentored grandparent volunteer, and a group with a grandparent volunteer that is mentored by the classroom teacher. The grandparent volunteer groups will meet for 20 minutes two times a week to work on literacy skills. The mentoring will consist of training in effective teaching techniques and structured learning activities.

Informed consent from all parents will be obtained by mailing home the informed consent letter and a copy to be signed and returned. The school's reading consultant will collect DIBELS scores as it is the status quo, and eliminates researcher bias. The first grade teaching assistant conducting the survey will also be unaware of what child is in which group to maintain the study's integrity.

Instrumentation

All students in the school participate in the DIBELS assessment from kindergarten to 3rd grade to assess their developing early literacy skills. In kindergarten DIBELS assesses vocabulary, letter recognition, and phonemic awareness. The data is collected by the reading consultant and then distributed to the classroom teachers and special education administrator. The assessment is given in the fall, winter, and spring, and also to at-risk students every 6 weeks providing for ample data collection points.

The student survey has three questions that the children will point to a 3-point Likert scale depicted as a frown (1), a neutral face (2), and a happy face (3) to answer. The students will be surveyed by a first grade teaching assistant who will be blind as to what group they are in. The survey will be presented orally by the teaching assistant.

Data Analysis

To address research questions one and three regarding student achievement, descriptive statistics will be used to examine the mean of students' DIBELS scores within their respective groups. These scores will then be combined across the three classrooms. A separate correlational analysis will be conducted to examine the students' scores on the DIBELS assessments between the control, non-mentored grandparent, and mentored grandparent groups. SPSS (V. 14.0) and the one way analysis of variance (ANOVA) will be used for this. This data would best be represented by three separate bar graphs, one for each of the fall, winter, and spring DIBELS data collection points. Each bar graph will have three bars representing each of the groups' mean achievement for the corresponding sections of the DIBELS assessments.

To address research question two regarding students' attitudes toward the grandparent volunteers, descriptive statistics will be used. These statistics will be presented by a pie chart for each of the three questions.

Limitations of the Study

This study has some limitations. First, the population though diverse with respect to a large special education population, is limited to a Caucasian, upper middle class majority. Further research should be conducted to expand the demographics of the sample population.

Second, the content of the mentoring of the grandparent volunteers is being left up to the classroom teachers they are working with. While this allows for the teachers to

provide specific training to the grandparents it may not be consistent from class to class. Further research might be conducted with a specific mentoring program in place.

Third, in my 7 years of experience working with kindergarteners, there is a portion of the population that does not respond well to assessments, especially from teachers they are not familiar with. This may affect the accuracy of the data collected from the DIBELS and student surveys. Future research could include a separate assessment by the teachers in addition to the DIBELS. It may also include qualitative data gathered by teachers to reflect the children's attitudes toward grandparent volunteers.

References

- Bird, K. (2006). Student information systems>>How do you spell parental involvement? S-I-S. Retrieved 06/14/2008 from <http://www.thejournal.com/the/printarticle/?id=17866>
- Fenzel, M. & Flippen, M. (2006) Student engagement and the use of volunteer teachers in alternative urban middle schools. Presented at the annual meeting of the American Educational Research Association, San Francisco, April 8, 2006.
- Hung, C. (2007) Family, schools and Taiwanese children's outcomes. *Educational Research*, 49, 115-125.
- Jeter-Twilley, R., Legum, H., & Norton, F. (2007). Parental and community involvement in schools: does socio-economic status matter? Online submission to ERIC database.
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/29/88/46.pdf
- Oyserman, D., Brickman, D. & Rhodes, M. (2007). School Success, Possible Selves, and Parent School Involvement. *Family Relations*, 56, 479-489.
- Porter DeCusati, C. & Johnson, J. (2004). Parents as Classroom volunteers and Kindergarten Students' Emergent Reading Skills. *Journal of Educational Research*, 97, 235-245.
- University of Oregon Center on Teaching and Learning. Official DIBELS Home Page. Retrieved on 06/24/2008 from <http://dibels.uoregon.edu/index.php>.
- Wright Group. (1996). *Sunshine Assessment Guide: Grades K-1*. Bothell, WA: Author.

Appendix 1:

Survey Instrument for Kindergarteners

1. How did you feel about having grandparents in your classroom?

(1) sad

(2) neutral

(3) happy

2. How do you think your friends feel about having grandparents in your classroom?

(1) sad

(2) neutral

(3) happy

3. How would you feel about grandparents being in your classroom next year?

(1) sad

(2) neutral

(3) happy

Informed Consent Letter (Pilot Study)

Dear Parents and/or Caregivers,

I am currently conducting research on the effectiveness of a volunteer grandparent literacy program. You and your child are invited to participate in the study designed to support the grandparent volunteer program. Your child's participation in this study will consist of random placement in a literacy group, anonymous inclusion of their DIBELS scores as part of data collection, and answering a three question survey about their experience. This study will allow me to explore three research questions.

- How did grandparent volunteer groups effect student achievement as measured by scores on the Dynamic Indicator of Basic Early Literacy Skills (DIBELS) assessments?
- Did the students have a positive reaction to grandparent volunteers as measured by a three point Likert scale interview?
- Was there a difference in student achievement between the volunteer grandparent groups who were mentored by the classroom teachers and the volunteer grandparent groups that were not?

If you choose to allow your child to participate in this study, simply sign the attached copy of this consent form and return it to school. Participation in this study is voluntary. By signing and returning this letter, you are consenting to allow your child to participate in this study.

Take as long as you like before you make a decision. I will be happy to answer any question you have about this study. If you have further questions about this project or if you have a research questions concerning you or your child's rights as a research subject, you may contact me, (at school 860-928-2718; by email: martel@pomfret.ctschool.net).

Thank you for your consideration.

Sincerely,

Brian Martel
Kindergarten teacher
Pomfret Community School