The purpose of this study is to use observations, questionnaires, and discussions with the principal investigator to encourage awareness of gender equitable teaching behaviors of K-5 classroom teachers at an elementary school in the Bronx, New York. During the observations of these teachers, there was a balance seen in the active interactions by teachers calling on both male and female students. Furthermore, this balance in teaching practice was supported by the teachers' questionnaire responses. Finally, their discussions with the principal investigator provided anecdotal insight into their teaching practice, including comments about higher level thinking, encouragement of students, and effective classroom discipline. The replication of this study in a middle or high school setting is recommended to determine if teaching adolescents will show differences and/or similarities in gender equitable teaching practice. (SM)
Do Boys or Girls Rule?

Gender Equitable Teaching Practice of K-5 Classroom Teachers at an Elementary School in the Bronx, NY

Barbara C. Perry

ABSTRACT

The purpose of this study is to use observations, questionnaire and discussions with the PI to encourage the awareness of gender equitable teaching behaviors of K-5 classroom teachers at an elementary school in the Bronx, New York. During the observations of these teachers, there was balance seen in the active interactions by teachers calling on both male and female students. Furthermore, this balance in teaching practice was supported by the teachers' questionnaire responses. Finally, their discussions with the principal investigator provided anecdotal insight into their teaching practice including comments about higher level thinking skills, encouragement of students, and effective classroom discipline. The replication of this study in a middle or high school setting is recommended to determine if teaching adolescents will show differences and/or similarities in gender equitable teaching practice.

INTRODUCTION

When boys and girls are sent to elementary school the expectation of their parents is that they will be treated equally in the classroom. The belief is that both boys and girls will be cautioned to follow the rules, that they will be given equal praise for their work and time to formulate and express themselves to the teacher and that the language they hear will help them grow to understand both the female and male point of view. There may be a different reality that girls and boys in elementary school face.
LITERATURE REVIEW

As elementary school teachers can be a student’s first experience with adults other than their immediate family members they must be seen as a primary group to promote gender equity in the classroom. Yet, cultural experiences can get in the way. To learn more about how children are taught and the influence teachers have in directing the learning process, the pioneering work of David and Myra Sadker is extremely worthwhile to review:

Sitting in the same classroom, reading the same textbook, listening to the same teacher, boys and girls receive very different educations. From grade school through graduate school, female students are more likely to be invisible members of classrooms. (Sadker & Sadker, 1994 p. 14)

Moreover the gender bias that can be exhibited by elementary school teachers can be very subtle. Well meaning teachers do not always recognize the bias exhibited in their own behavior and, therefore, do not attempt to change it. (Wellhousen, 1996) There is a need to help elementary school teachers become aware of their “hidden” gender bias. Teachers may remind girls to follow the class rules more often than boys with the hidden inference that it is more important for girls to comply. Classroom duties may be assigned according to gender where there may be no logical reason to assign lifting and carrying tasks to boys. It is especially important in the early grades to confront the practice of assigning “maleness” to job labels. When elementary school children rely on concrete interpretations in early language development, the use of “policeman, fireman, postman” sends the message that these jobs are held by men, and are
acceptable according to gender. Teachers need to use language that does not perpetuate bias. (Wellhousen, 1996)

Teachers in elementary school have a responsibility to uncover their own gender bias and change their practice to encourage gender equity in the classroom. The authors, Dyanne M. Tacy and Michele B. Lane quote the work of Sanders, Koch and Urso and Rose and Dunne to explain the need for gender equity education in pre-service teacher training programs. They directly quote Masland (1994) who recommended:

...four areas where teacher education faculty could influence future teacher’s gender equity practice (1) use of inclusive language, (2) incorporating the experience and history of girls and women into curricula, (3) the use of equitable teacher behaviors, and (4) assisting preservice teachers in the practice application of the aforementioned strategies.

The authors conducted a three-year study of pre-service teachers to focus on assisting preservice teachers with the application of the use of equitable teacher behaviors and assistance to help them evaluate themselves on this practice. As a teacher in an elementary school in the Bronx, I have found that our professional development focuses on curriculum, test performance and classroom management. The issue of gender equity is only tangentially addressed. The study by Tracy and Lane provides specific gender equitable teaching behaviors to observe and a tracking mechanism to quantify those behaviors when they appear in the classroom. By adding the anecdotal “Do’s and Don’ts” of the researcher Karyn Wellhousen to help eliminate gender bias,
this principal investigator feels qualified to observe classroom teachers on the K-1, 2-3, 4-5 grade levels to replicate their studies and add these observations to the study of gender equitable teaching behavior in the classroom.

RESEARCH QUESTIONS

If gender bias or gender equity exists in a teacher’s classroom the challenge is to bring these facts into teachers’ awareness. If they are not aware of their choices in reinforcing gender stereotypes or balancing students’ perceptions by offering alternatives to gender stereotypes how can students’ feel safe and open to new learning experiences. The goal of this principal investigator is to use observations, a questionnaire and discussions with randomly selected classroom teachers to explore the following:

1. How can both boys and girls be encouraged to respond to higher level thinking questions during class instruction?
2. What is the role of encouragement to boys and girls as instruction occurs?
3. Does a teacher’s non-verbal behavior, such as physical closeness, have an impact on teaching instruction for boys and girls?
4. For effective classroom management do boys and girls need different discipline techniques?
PROCEDURE

Two classroom teachers on each grade levels K-1, 2-3 and 4-5 were observed at the start of the research and a checklist (Appendix A) was used to note gender equitable/biased behaviors observed. The teachers completed a Likert scale questionnaire (Appendix B) indicating their beliefs about gender bias/equitable teaching behaviors. There is complete confidentiality associated with the teachers' participation, they will only be known by name to the principal investigator.

The classroom teachers have also met with the principal investigator to discuss the observed behaviors in the classroom. This meeting with the teachers and had the goal of increasing their awareness of gender biased/equitable teaching practice. The PI had planned to see an increase in teaching equitable behaviors observed during the second observation of the randomly selected six teachers, four female, and two male. However, after reviewing the questionnaire results and the observation results with the teachers who agreed to participate the PI believed that there was no need for a second observation as the teachers' are showing equitable teaching practice in their classrooms and equitable teaching philosophy in their beliefs.

LIMITATIONS

There are limitations to this investigation. The teachers selected will not be observed over the course of a school year, or for more than one school year.
The type of instruction will be varied due to the use of preparatory periods for observation by the principal investigator. The observation of only one instructional subject such as mathematics would provide more consistency in the observation of gender bias in teaching instruction. This limitation was addressed in the questionnaire by including questions that challenge established beliefs about boys' domination of math/science and girls' domination of literacy/social studies learning.

RESULTS/OBSERVATIONS/QUESTIONNAIRE

Although there were only 6 teachers in the sample and the time to observe them did not yield a large amount of interactions, the data does show significant trends. The number of interactions which were judged to be "active" (Figure 1), meaning that the teacher was using higher level questioning, encouragement and physical closeness in his/her teaching practice were greater than those judged to be "passive " (Figure 2), merely accepting an answer or waiting to hear an answer. It is not only the total number of interactions which are significant but also that there was balance seen in the active interactions by teachers calling on both female and male students. The passive interactions by the six teachers observed were also balanced among male and female students. It is important to note that the use of "wait time" by the teachers is significant because they are allowing students of both genders enough time to think through their answers and not merely calling upon the first hand that is raised.
There was 100% response to the questionnaire given to K-5 teachers. This is due to the small sample of teachers observed and their proximity to the principal investigator. The raw Likert scale responses are shown in Table 1 and by taking a simple average the following results were seen in teachers' opinion as to gender equity in teaching practice.

The teachers' surveyed agree strongly that boys and girls should receive a teacher's equal time and attention, should follow the same classroom rules, and that teachers should used non-biased language and non-stereotyped instructional materials. They agree that girls and boys should be encouraged and challenged in their work and that the use of boy-girl grouping techniques provides for greater instructional success in the classroom. The teachers' surveyed were neutral in their belief that one gender needs encouragement in a certain type of curriculum learning, i.e. girls need encouragement to participate in math/science and boys need encouragement in literacy/social studies. There was a distinct opinion in the encouragement of girls and boys in the area of technology learning, the teachers' surveyed did not believe that either gender needed encouragement. It would be interesting to survey middle school teachers in this area of gender equity. The comparison of views of elementary school teachers and middle school teachers may show a marked difference.

Finally, teachers agreed strongly that they must pay attention to their own teaching practice to become aware and change any hidden gender bias towards girls or boys. This idea was further covered in the individual discussions with the teachers who participated in both the observations and the survey.
DISCUSSION

During the creation of this research project, the following questions became part of the post-observation discussion. The raw observation and questionnaire data did not attempt to answer these questions directly and anecdotal responses help to increase understanding of the data gathered.

How can both boys and girls be encouraged to respond to higher level thinking questions during class instruction?

This issue can be addressed by additional professional development for teachers in their practice. The use of higher level thinking skills at all grades not only prepares students for standardized tests but allows them to be active participants in their own learning.

Kindergarten Teacher

The observation time for this teacher was during the "Center Time." The PI observed how wonderfully this teacher incorporated higher-level thinking skills into her teaching practice. For both girls and boys, she urged the children to use their creativity and imagination to enhance their learning experience in the dramatic play, wooden block, math, painting and computer "centers." She reminded the children that there are books in the wooden block area to use to make buildings. The plan at the dramatic play area included imagining that you are a veterinarian. The children are given a choice of which center to visit based on their behavior during the day, significantly, the two students with the best
behavior of the day were girls and they chose the computer area and worked cooperatively in the program "Bailey's Book House."

What is the role of encouragement to boys and girls as instruction occurs?

With active encouragement, students are motivated to work. During a math lesson I make sure to ask, 'Does anyone else have a different way to solve this problem,' that way students are reminded that there may be many strategies available to them to reach the answer and they can use these strategies to improve their results on standardized tests. 2nd Grade Teacher

The observation time for this teacher was during mathematics and she demonstrated her philosophy. Not only showing students multiple strategies to solve math problems but also frequently encouraging the students in her second grade class.

Does a teacher’s non-verbal behavior, such as physical closeness, have an impact on teaching instruction for boys and girls?

No teacher interviewed had any strong agreement or disagreement about the impact of physical closeness on instruction. The research project observations also showed that teachers moved closer to request an answer or clarify a student’s response equally to boys and girls or were stationary to allow for students to focus on the curriculum material.
For effective classroom management do boys and girls need different discipline techniques?

Classroom discipline is more than just a gender issue; it is a combination of using effective classroom procedures, effective encouragement of both group and individual effort and understanding how to reach each student in the class. 3rd Grade Teacher

The observation of this teacher's classroom confirms her philosophy. During the mathematics lesson she mentioned the good work she saw happening in the table groupings. She mentioned how she appreciated certain students' using the manipulative blocks given out as tools and not toys during the lesson. She also effectively used the Success For All reading program hand signals to get students' attention and to direct them to the next task during the lesson. It is wonderful to report that all the teachers observed were using effective classroom management techniques to keep their students focused on instruction and motivated to learn.

SUMMARY

Even with the limitations of this research project I believe the goal to explore gender equitable teaching practice in the classroom has been achieved. The teachers observed, surveyed and who generously agreed to discuss their philosophies show that they are aware of the need for gender equity in their teaching instruction and choose to help both girls and boys learn as equitably as possible. They choose to use non-biased language and non-stereotyped
instructional materials. More important, is how the teachers use non-biased behaviors of patience, perseverance, encouragement, motivation and discipline during instruction. This was true whether the subject was literacy, mathematics or "center time."

My recommendation would be to replicate this study in a middle school or high school setting. The questionnaire opinions might be quite different as these teachers encounter adolescents. In addition, their teaching practice may need to be adapted to meet or challenge the gender bias that may be more readily seen in adolescents. For this study, I appreciate the time and am grateful for these elementary school teachers' cooperation. I am sure that I will find some of their equitable teaching instruction appearing in my practice as I continue in the teaching profession.
REFERENCES


Figure 1

Teacher Interactions Grades K-5
By Gender

Female
Male

Higher Level Questioning
Active Interactions
Encouragement
Physical Closeness

Number of Interactions

25 20 15 10 5 0

22 19 16 13 11
Figure 2

Teacher Interactions Grades K-5
By Gender

- Acceptance of Answer
- Passive Interactions
- Wait Time

Number of Interactions

Male
Female
### Table 1

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Appendix A

Teacher: ____________________
Observer: ____________________
Observation Time: ____________
Subject Area: ________________
Total number of Females: ______
Total number of Males: ________

One row corresponds to one interaction

F = Female
M = Male
1 = First time student is called on to respond
R = Recorded any time a student is called on after the 1st time

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Appendix B
Circle One – Teacher Grade  K-1  2-3  4-5

Please answer the following questions by rating on a scale of (5) agree strongly to (1) disagree strongly.

1. I believe that boys and girls should receive a teacher’s equal time and attention, boys and girls should receive equal amounts of time to answer questions and complete tasks.

5  4  3  2  1
agree strongly  agree  don’t care  disagree  disagree strongly

2. I believe that the same rules should follow for boys and girls. As an example: both need to be reminded to raise their hands in class.

5  4  3  2  1
agree strongly  agree  don’t care  disagree  disagree strongly

3. I believe that boys and girls should both be praised for their ability and challenged in their work. It is unhealthy if girls are praised for beauty and boys for intelligence.

5  4  3  2  1
agree strongly  agree  don’t care  disagree  disagree strongly

4. I believe that teachers should use non-biased language and non-stereotyped instructional materials.

5  4  3  2  1
agree strongly  agree  don’t care  disagree  disagree strongly

5. I believe that the use of boy-girl grouping techniques can provide for greater instructional success in the classroom.

5  4  3  2  1
agree strongly  agree  don’t care  disagree  disagree strongly
6. I believe that girls need encouragement to participate in math/science learning. Boys dominate these activities.

5 agree strongly 4 agree 3 don't care 2 disagree 1 disagree strongly

7. I believe that boys need encouragement to participate in literacy/social studies learning. Girls dominate these activities.

5 agree strongly 4 agree 3 don't care 2 disagree 1 disagree strongly

8. I believe that girls need encouragement to participate in technology learning.

5 agree strongly 4 agree 3 don't care 2 disagree 1 disagree strongly

9. I believe that boys need encouragement to participate in technology learning.

5 agree strongly 4 agree 3 don't care 2 disagree 1 disagree strongly

10. I believe that teachers must pay attention to their own teaching practice to become aware and change any hidden gender bias towards girls or boys.

5 agree strongly 4 agree 3 don't care 2 disagree 1 disagree strongly

Information to be completed Please circle one response All responses will be kept confidential.

Number of years teaching: Less than 2 2-5 5-10 10-15 15+

Age: 21-29, 30-39, 40-49, 50-59, 60+

Gender: Male Female

Last Degree Completed BA/BS MA/MS 2nd MA/MS PhD
Title: Do Boys or Girls Rule? Gender Equitable Teaching Practices in K-5 Classroom Teachers at an Elementary School in the Bronx, NY

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