



NATIONAL SURVEY OF TEACHER BELIEFS AND PRACTICES RELATED TO PEER TEACHING

REPORT SUMMARY

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INTRODUCTION

The goal of this project was to survey practices of K-12 teachers to determine the extent to which, and how, they engage their students in teaching as a strategy for learning, the reasons for using peer teaching, and the kinds of settings and practices through which this actually occurs. The survey was designed to answer the following basic questions:

- To what extent do teachers ask students to engage in teaching-like activities and what grouping strategies do teachers use? To what extent are these strategies identified with commonly recognized and researched peer teaching practices (i.e., cooperative learning, reciprocal teaching, peer tutoring) and to what extent are they other types of strategies?
- What reasons do teachers give for using these strategies in their classroom?
- To what extent do teachers recognize and deliberately develop pedagogical talent in their students?
- What patterns exist in participants' responses according to grade level, subject matter, school demographics, and years of experience?

METHOD

A questionnaire containing 22 questions about peer teaching was constructed, piloted on a small sample of teachers, and revised. A list of 10,000 public school teachers was obtained from Quality Education Data; questionnaires, cover letters, and postage paid return envelopes were sent to them in April 2003. The teachers on the list had been randomly selected from the approximately 3.1 million public school teachers in the United States. Two weeks after the first mailing, a reminder postcard was sent to all 10,000 teachers, asking them to complete and send in the questionnaire if they had not already done so.

RESULTS

A total of 1,075 surveys were returned, for a response rate of 11%. Eighty three percent (83%) of the respondents were female. The age of the respondents ranged from 23 to 74 years, with a median age of 48. The respondents had a median 15 years of teaching experience.

The survey found that a high proportion of the sample used peer teaching; 85% of the respondents used classroom strategies related to peer teaching at least once a week. Of the types of peer teaching listed on the survey, the most commonly used was cooperative learning or collaborative learning groups, followed by the three different types of paired peer tutoring. The most common of those was same age peer tutoring (higher ability to lower ability), then reciprocal peer tutoring and, finally, cross-age peer tutoring (higher ability to lower ability). Least frequently used were reciprocal teaching, student-led classes or sessions, and older students teaching a group of younger students. "Other" types of peer teaching listed include peer editing, learning centers, ability grouping, older

students helping out in a class of younger students, and assigning students to teach family members.

The study also found that a surprisingly high percentage of teachers think about the teaching ability of their students. Although most used peer teaching “to enhance the learning of all students,” almost half of those who used peer teaching marked “develop teaching ability of students” as a reason for using peer teaching. A relatively small percentage of respondents claimed that they had not really thought about how many of their students are interested in helping others or how many of their students are effective at helping others. Results indicate that respondents are more likely to believe that higher proportions of their students are interested in teaching others than are effective at it. These responses plus the related finding that thirteen percent of the respondents reported that they think about the teaching ability of their students “a lot” indicates that there are teachers for whom the issue of developing pedagogical ability in students is of some importance and is worth investigating further.

Certain personal characteristics of teachers in our survey were related to their use of peer teaching. Younger and less experienced teachers were more likely to use peer teaching, and to think about teaching ability of their students. It appears likely that this link between use of peer teaching and age/experience was found because learner-centered and constructivist approaches to teaching, consistent with peer teaching, are emphasized more in teacher training now than they were in the past, and younger teachers are more likely than older teachers to have pre-college experiences that included small-group learning strategies. And, as suggested earlier, using peer-teaching approaches logically makes a teacher more likely to think about teaching ability of students.

Elementary teachers were more likely to use peer teaching and to think about teaching ability of their students than middle/high school teachers. This finding is consistent with what is known about secondary school teaching. The larger student loads per teacher in secondary school, and the prominent use of lecture and teacher-centered approaches at those levels seem inconsistent with peer teaching methodologies. In terms of thinking about developing teaching ability of future teachers, this finding is ironic in that secondary level students are closer to selecting a career, and hence arguably could benefit most from working on teaching others. On the other hand, the relatively strong interest of elementary teachers in peer teaching signals a good opportunity to work on developing structures for enhancing pedagogical ability at a young age, since teachers of younger children tend to be more interested in allowing children to teach each other and in developing such skills.

Teachers who reported being in small schools reported using five of the seven types of peer teaching significantly more than those in larger schools. The two for which significant differences were not found were student-led classes or sessions and cross-age peer tutoring, for which reports of use were generally low; this could explain the lack of significance in those cases. Small schools are associated with better student achievement (Barker and Gump 1964; Roeser, Midgley et al. 1996; Lee, Smith et al. 1997). Peer teaching approaches are likely a part of more learner-centered orientations towards teaching, which may be consistent with better support and flexibility for managing the learning situation by teachers in smaller schools. School size may also be correlated with class size, and smaller classes may lend themselves better to use of peer teaching strategies.

CONCLUSION

Because of the low return rate, this survey did not verify the percentage of American teachers who use peer teaching. However, it does provide an indication of types of peer teaching strategies that are used by teachers, and it confirms that many teachers recognize a variety of forms of peer teaching approaches. More importantly, it indicates that many teachers do in fact think about the pedagogical abilities of their students, both in terms of their interest in teaching others and their effectiveness in doing so. This finding is encouraging for educators who believe that developing structures for improving teaching abilities in K-12 students would be a valuable addition to the K-12 curriculum. It also adds further value to the well-documented achievement benefits of good grouping strategies.

Although patterns of responses found in the study should be interpreted with care, the findings support the view that elementary teachers and younger teachers are more interested in peer teaching and in developing teaching ability in students. These teacher groups provide possible areas in which to begin initial interventions. Other research (see Puchner 2002) clearly supports the assumption that elementary and secondary students benefit from teaching others, and this study encourages efforts to increase these benefits by improving peer-teaching abilities in K-12 students.

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