ABSTRACT
        A cross-age tutoring program conducted in an
elementary school is described. Part I of the report concerns reasons
for instituting such a program. Benefits are predicted for (1) the
tutor, in improving his/her attitudes toward learning, (2) for the
tutee, by promoting a positive relationship with an older child, (3)
for the teachers, in providing needed assistance, and (4) for the
researcher, in providing unusual opportunities for applied studies.
Part II discusses the actual operation of the program. Fifth and
sixth graders tutored 1-3 graders, aided by teachers and group
leaders. Major problems were the need for additional resources for
the tutor, and the need for increased teacher participation. Issues
of interest to the teachers involved are discussed. Tutor training is
also considered, with emphasis on the content of on-going seminars.
Part III concerns issues of program evaluation and provides
suggestions for research that have arisen from program operation.
(DP)

CROSS-AGE TUTORING

John W. Hagen and Tamerra Moeller

University of Michigan

ED 085090

PS 006918

This report contains three sections. One section considers a variety
of the reasons for instituting a cross-age program; another section discusses
the actual commencement and operation of such a program. The third per-
tains to methods of evaluating the program and suggestions for further research.

I. Reasons for a cross-age tutorial program.

The benefits of a cross-age tutoring program appear to be many.
Lippitt, Eiseman, and Lippitt (1969) suggest that the older child's attitude
toward learning and his performance in the classroom may improve while he
serves as a tutor. Also provided to the tutor is an "apprenticeship in the
field of service to others," an area in which there are an increasingly large
number of jobs. For example, the tutor learns to take responsibility, recog-
nizes that he may make a constructive contribution toward someone else's
welfare (even though he's not an adult), and discovers ways of being influential
other than through coercion or rebellion.

The tutee, or younger child, may develop a positive relationship with an
older child. He may receive help when he is having difficulties in a subject,
or he may, if advanced, receive help which enriches his understanding of a
subject not usually covered in the school curriculum.

More cooperative interactions have been seen on the playground; a
lessening of age-based stereotypes occurs. Both intellectual and social
changes are possible.

Teachers have the opportunity to receive helpers, who can give needed
individual attention which the teacher does not have time to give.

For the researcher, there are a great many opportunities offered by
cross-age tutoring. One may study the development of a helping relationship,
the quality of interactions among children of heterogeneous ages as compared
to interactions in age-homogeneous groups. Teaching styles of adults and
children may be studied, as well as the means by which an older child changes
the explanation of an event when working with a child younger than himself as
compared with a child of his own age.

II. Operation of a tutorial program.

The Thurston School (Ann Arbor, Michigan) program consisted of the
"little kids" (tutees -- first through third grade), the "older kids" (the tutors--

fifth and sixth grades)[1] the teachers of each of these groups of children, the helping teacher who coordinated the program, and the group leaders, a group of seven students who had been tutors and whose function was designed to have been that of a resource person for a small group of tutors. (In actuality, it was found that the tutors conceived of the group leaders as watchdogs.)

The tutors and tutees met from fifteen to thirty minutes, usually twice a week. The tutoring program lasted six weeks for each group of tutors. In addition, the tutors met as a group two or three times during the six weeks. The first group session oriented the tutors toward the responsibility they were undertaking; an additional session was spent discussing mutual problems and possible solutions. The tutors were also supposed to meet with their group leaders, but rarely did so.

The receiving teachers did not have an orientation; they met with the tutors briefly before a tutoring session, but there were rarely any planned meetings between the tutor and the receiving teacher. The tutors expressed some uncertainty about how the receiving teachers felt about the program.

The tutors, particularly in one group, indicated they lacked ideas about materials to use with the younger children and ways to cope with discipline problems.

In summary, there appears to be a need to make more resources available for the tutor--both on academic and social problems. Secondly, there appears to be a need to increase the receiving teachers' enthusiasm and involvement in the program.

Lippitt et al have numerous suggestions with regard to these aspects of the cross-age tutoring program. They have found that the receiving and sending teachers should meet with the program coordinator and should be introduced to the program and encouraged to express their concerns (certain questions occur frequently).

1. Do the tutors miss much work? All the sending teachers at Thurston reported there were rarely, if any, problems about making up work.

2. Do the youngsters resent being selected for special help? At Thurston,

---

[1] When the nearby junior high is completed, the cross-age tutoring program could involve pupils at both schools.

they usually felt privileged. Lippitt et al found the same result.

3. <u>What do tutors do about discipline problems?</u> Many suggestions were given by Thurston students as to how to handle problems. It was evident they did on occasion dispense discipline and employ control techniques. Lippitt et al instruct their tutors to refer problems to teachers; the tutors are not to be disciplinarians.

4. <u>Who should the tutees be?</u> Lippitt et al suggest that tutors should be given youngsters with whom they have a <u>reasonable chance to be successful.</u> They should be told of handicaps their tutees possess and goals the teachers have so that they do not feel unsuccessful where progress is slow. The Thurston program followed these guidelines when possible.

5. <u>How are the tutors picked?</u> Lippitt et al found that children who themselves have had difficulty learning are often more understanding of the difficulty slower children may have than are children for whom learning comes easily. They should feel sufficiently more capable than the younger so as to have "a feeling of potency and a desire to nurture the younger child." At Thurston, the tutors were volunteers from the fifth and sixth grade classes.

6. <u>Is it advisable to inform parents?</u> At Thurston parents were informed of their children's participation. Lippitt et al state that it is desirable to describe the major objectives and to explain that the help given is supervised by a teacher.

7. <u>How many tutees should a tutor have?</u> Some tutors at Thurston worked with only one child each session and the same child across sessions, while others worked with groups ranging from 2-4 children and the specific children varied. Most tutors preferred working with one child on a continuous basis. Many of those who had different children felt there was no opportunity to witness progress in a particular child.

8. <u>Where does tutoring occur?</u> a) In the classroom at one side or in the extra room; b) the library; and c) the corridor, which was the least satisfactory, but not totally disliked.

9. <u>Are older children really to be trusted to work when not under direct supervision?</u> Both projects found there was no problem as long as the tutors had been given a thorough briefing concerning what the younger children could be expected to accomplish.

10. **When does tutoring occur?** At Thurston, the time of day was decided upon by the tutor and receiving teacher. It was usually the same time each day, two to three times per week. The tutors in the Lippitt project also tutored at the same time each day, three to four days a week, for about thirty minutes per session.

11. **How long does an older child stay with a younger child?** At Thurston, the particular groups stayed together for six weeks at a time. A small number of tutors was allowed to continue for a second six-week period. In Lippitts' program, the tutor-tutee remain together for at least two weeks and continuation depends upon the discretion of the receiving teacher. The program continues for ten to eighteen weeks.

12. **What age gap should there be between the tutors and their tutees?** Lippitt et al stress the importance of the tutor being older. Usually, there should be at least three years difference and the tutor should be proficient in the skills he is supposed to teach. In some instances at Thurston, though, an older child who was having problems in a subject at his grade level might be assigned to a younger child with problems in the same area, but where the skill level is within the older child's grasp.

13. **With children teaching, aren't teachers giving away their special privileges or downgrading the profession?** The teacher should see himself as the manager of the learning situation, according to Lippitt et al. His managerial skill is another way of making children interested in learning.

14. **What if the tutor and the tutee are incompatible?** At Thurston, the tutors are called "classroom helpers" and the teacher could make a reassignment if necessary. Lippitt et al suggest that the teacher should assign the tutor in such a way that both perceive the situation as being on a trial basis. "I want you to help Steve for the next three days. Then we can see if we think this is going to work out well for you both." The teacher should set a goal of honesty and rapport so that the older and the younger would feel free to express discontent.

The receiving teachers. The benefits to the receiving teachers should be expressed. They are not giving up authority but are extending their skills. They are actually increasing their influence. Their diagnostic and creative skills are being used to provide individual attention that they themselves do

not have time to give. They may gain satisfaction from making an important contribution to the education of an older student. Furthermore, they may have more time and energy to devote to the needs of their other students. They are providing ways for their children to become more adequate learners, to be more effective participants in the class, and to achieve better opinions of themselves. Lippitt et al stress that the receiving teachers' attitudes are very important determinants of the program's success.

The tutors' training. Lippitt et al suggest conferences between the tutor and the receiving teacher. A series of seminars was conducted at Thurston by the helping teacher. The conferences should occur about once a week for fifteen to thirty minutes. The teacher and the tutor should exchange information about the younger child's problems and progress. The teacher then decides what direction the younger child's work should take; together, she and the tutor plan concrete steps.

The seminars for the tutors occur before and during the tutoring project. The preservice training involves at least one seminar concerning learning difficulties. Lippitt et al have developed a series of ten pictures related to a variety of reasons children fail to learn. For example, one picture shows a child staring into space and thinking to himself, "I can't let anyone know I'm behind." Some of the reasons tutors see for this child's failure is that he doesn't understand; he is behind the others, and doesn't want to reveal this. The remaining pictures concern children in the following situations:

1. They are preoccupied with peer-status concerns or some other important issue.

2. They think it is square to show interest in academic work. Peer leaders have anti-learning attitudes. The perceived group norms are anti-learning.

3. They see themselves as dumb, inadequate.

4. They cannot see any relevance to their studies.

5. They have anti-adult, anti-teacher feelings. They want autonomy from teachers and other adult authority figures.

6. They perceive older kids as being anti-school work.

7. They lack individual attention; the teacher has no time.

8. The class lacks norms to help others.

9. There is a lack of challenge to one's level of ability.

Another seminar should concern what needs to happen to facilitate the development of a positive relationship between tutors and little kids. An example of certain facilitating and harmful qualities generated by a group of tutors are shown below:

Further apart   <--------------------------------->   Nearer together
More unfriendly   More friendly

Things older children do

helping ---------------->   <------------- teasing
protecting ------------>   <------------- exploiting
caring for ------------>   <------------- avoiding
including ------------->   <------------- neglecting
praising -------------->   <------------- blaming
liking ---------------->   <------------- ganging up on
                                  <------------- scapegoating

Things younger children do

helping ---------------->   <------------- teasing
liking ---------------->   <------------- tattling
appreciating ---------->   <------------- tagging along after
cooperating with------->   <------------- being a nuisance
wanting to be like----->   <------------- blaming
                                  <------------- acting silly
                                  <------------- breaking, destroying
                                                     tutor's efforts

Another preservice seminar should concern ways to help youngsters feel important and successful. The leader can suggest topics, such as shown in items #1-#6. The tutors are encouraged to brainstorm in order to come up with concrete examples of the following qualities.

1. Make the little kids feel important.

2. Make them feel successful.

3. Demonstrate your belief in them so they will try harder.

4. Give them a feeling of being accepted and liked.

5. Make them feel useful; suggest ways they can help you or others.

6. Make learning fun.

Lippitt et al strongly suggest that the tutors carry out an interview with a younger child. The interview might be carried out during the tutor's first session with his tutee. The following schedule is an example of questions which might be asked.

1. <u>How old are you?</u> This question can be easily answered and gives the younger child a feeling of success right away. It also tells if he is younger or older than most of his classmates.

2. <u>How many brothers and sisters do you have?</u> <u>How old are they?</u> <u>In what grades are they?</u> This question gives information about the tutee's place in his family. His position may affect his attitude towards himself and his ability.

3. <u>How do you know when it's time to get up in the morning?</u> This question tells about self-reliance, his home relationships and who cares for him.

4. <u>What did you have for breakfast?</u> The question tells more about his family life and his energy level when he reaches school.

5. <u>Did you come to school alone or did you come with someone else?</u> This question reveals if he has friends living nearby, if he's alone, and who he associates with.

6. <u>What's happened today that you like a lot?</u> <u>Why?</u> The tutor can find out what causes the tutee to feel good.

7. <u>What happened today that you didn't like at all?</u> <u>Why?</u> The tutor can find out what causes the tutee to feel bad.

8. <u>How do you feel about school work?</u> <u>Why?</u> This question give one an idea about little kid's attitude toward learning school subjects.

9. <u>How do you feel about older kids?</u> <u>Why?</u> The tutee's attitude toward older kids will be important if the older child is going to help him.

10. <u>How does your best friend feel about school?</u> <u>Why?</u> Sometimes the tutee gives a truer picture of his own attitude than the one he says is his attitude.

11. <u>What is the most important thing you are going to do after school today?</u> This question tells if the tutee has major interests outside of school or what is important to him.

After conducting the interview, the tutors are asked to analyze their data. For example, the following schedule has been suggested.

1. How do you think the younger child you interviewed feels about himself?   What makes you think this?

2. How do you think he feels about other children?   What makes you think this?

3. How do you think he feels about school, about teachers, or other "authority figures"?   What makes you think this?

4. How do you think he is doing in school?   What makes you think this?

These results should be discussed in a seminar session, though each tutor would withhold the name of his tutee.

The majority of the inservice seminars will concern discussion of problems which have arisen. The seminar leader should be aware of the wide variety of questions he may use as probes.

1. What difficulty is the tutee having? Why?

2. What needs to happen for him to succeed?

3. What does he need to learn to do a better job?

4. How can the tutor help him learn this skill?

5. How can the tutor make the tutee feel good about where he is now and at the same time encourage him to learn to do better?

Lippitt et al also suggest that after each seminar, particularly those in the beginning of the program, all tutors should individually evaluate their participation in the seminar.

1. How happy are you today about your participation in the discussion?
Very happy   Fairly happy   Not very happy   Not happy at all

2. Why did you mark the scale as you did?

3. Were there times when you wanted to talk but you didn't?
Many times   Some times   A few times   No times

4. What would you have liked to say but didn't?

If some tutors are monopolizing the discussion, this should be aired openly.

In summary, one can see some examples of the variety of seminars which could enhance the success of the cross-age tutoring program. The examples given are by no means exhaustive. The teacher in charge could use her discretion as to what other materials would be beneficial to include.

III. Evaluation and suggestions for further research.

There are many issues to be evaluated in a cross-age program. Changes in academic performance and social adjustment on the parts of the tutor and tutee are two examples. Teacher satisfaction, the quality of heterogeneous age interactions, and the means of building into the slow learner more effective learning strategies are also issues to be explored.

Some of the evaluation may rely on the use of standardized tests, on questionnaires designed specifically for the cross-age program and on observation schedules. The standardized tests are useful in evaluating academic performance; the questionnaires are valuable in assessing teacher, tutor, and tutee satisfaction with the program. Observations, however, are crucial if one is going to begin to formulate how, if at all, a sixth grader differs from an adult teacher in instructing a younger child. Lippitt et al report that often the tutors did not realize when they had discovered a good way to work with their tutees. Observations thus allowed this new technique to be made known to the rest of the tutors. With regard to questionnaires, it might be advisable to give the younger children one which they could mark by themselves, so that they could have privacy in stating their answers. The teacher could read the questions, but the children would mark their answers by themselves. One example from the Thurston Project uses faces with "Yes," "No," and "Maybe" (neutral) expressions on their faces.

Insert Figure 1 about here

A brief summary of some of the results which have not already been presented should be useful. For example, Lippitt et al, using the California Achievement Tests, the McDaniel Inferred and Self Concept Scales, and sociograms, found that both the tutors and tutees showed positive growth, as compared to their matched controls, in academic learning, self-concept, social acceptability, self-discipline, and attendance.

The research at Thurston was more concerned with the process of the teaching act and the social interaction between the tutor and tutee than the Lippitt research has been. Beginning with the tutor-tutee relationship, it was found that the older and younger males almost uniformly preferred to work with males. The younger girls wanted to work with older girls, while the older girls were neutral, i. e., willing to work with either sex. Thus, grouping children of the same sex together would generally be advisable. One might ask both the tutee and the tutor for their preferences before the tutoring commences.

With regard to techniques used by the tutors, both great variety and ingenuity were shown. However, the tutors needed a more adequate means of sharing their ideas. There should be a resource area to which all tutors have

access. If necessary the ideas could be written on cards covered with clear plastic. The cards should not only concern academic issues but social ones as well. The tutors should be encouraged to add any ideas of their own. With access to more ideas, the tutors might be able to be better prepared. Only half of the tutors reported they ever planned ahead, and only half of those followed through with their plans. The lack of planning was partly due to some tutors having different tutees each session and the lack of tutor-teacher conferences. Advanced planning might create more confidence in the tutor, more interest on his part, and a more productive session with the tutee.

Another issue concerning the tutors and tutees is the development of measures of learning. Perhaps one seminar for the tutors could be used to present a variety of measures which would be rewarding to the younger child. Additionally, research on positive reinforcement and punishment should be presented when discussing discipline.

Another area of investigation concerns the utilization of strategies to enhance learning. One might want to investigate if, for example, the younger children are using any strategies and what strategies they can be taught which would be particularly helpful in memory work. One might want to know whether verbal labels or pictures were more effective in helping a particular child to memorize material. One could investigate the role of reinforcement in building up a child's use of strategies.

Another area of investigation concerns differences between older students and teachers in their teaching techniques. For example, one could look at the role of motoric movement in teaching with regard to these two groups. Also, the question of cognitive stages arises in that older children are no doubt closer in cognitive development to the younger child than is the adult. One could ask if the older child's explanations to the tutee and his understanding of the young child's misperceptions were more effective than those of an adult. Also, there is the question of what adjustments the older child makes in explaining something to a younger child as compared to explaining it to a peer.

One more area of investigation concerns self-concept measures. It would be very interesting to know the influence of a child's perceptions of himself as a learner on his self-concept. For example, the effective learner's perceptions of his abilities may contribute differently to his self-concept than

the poor learner's perceptions of his abilities.

Finally, with regard to teachers, there should be some means by which they evaluate changes they have seen in the tutor and tutee, express problems which arise, such as continually late tutor, and have the opportunity to make suggestions about the program's operation. Also, the coordinator of the program should be sensitive to the use the receiving teacher makes of the tutor, i.e., the tutor may be used to aid the teacher, as a secretary, rather than actually teaching. The former situation arises far more frequently when the tutor is working with different groups of tutees at each session.

In summary, one can see that many processes may be investigated within the context of a cross-age tutorial program. The ideas discussed in this paper are by no means exhaustive. However, before any form of research occurs, one must work particularly with the receiving teachers so as to commence the program satisfactorily. Communication with the teachers should be accomplished early and continue regularly throughout the program.

12

Reference

The Cross-Age Helping Package ($60,00) by P. Lippitt, J. Eiseman, and R. Lippitt may be obtained from:

Cross-Age Helping Program
Center for Research on Utilization of Scientific Knowledge
University of Michigan
Institute for Social Research
Ann Arbor, Michigan 48104

The package contains a book which "includes orientation to the idea of cross-age helping, inservice training for a staff team, and training sessions for older children who will act as helpers." There is also a filmstrip giving an overview of one cross-age design. A record is available which is useful during the inservice training. Also, one may have consultation with the designers of this program.

Additional References for Cross-Age Tutoring

Asbell, Bernard. "Let the Children Teach". Redbook, Feb., 1966.

Bartel, Virginia. "Sixth Graders Make Terrific Tutors", Parents' Magazine, No. 42, September, 1967.

Barwick, Dorothea. "Youthful Volunteers Undertake Tutoring of Handicapped Students", The Volta Review, Vol. 72, No. 9, December, 1970.

Bonn, Myrtle. "Reading Pays: Youth Tutoring Youth Programs", American Education, Vol. 6, No. 8, October, 1970.

Booker, Janice L. "Third Graders Take Over", Parents' Magazine, No. 43, October, 1968.

The California Reader, Quarterly Newsletter of the California Reading Association, "Tutees the Name: Learnings the Game".

Cloward, Robert D. "Studies in Tutoring", Journal of Experimental Education, Vol. 36, May, 1967.

Driscoll, Patrick A. "A Summer Remedial Program for Primary Children", The National Elementary Principal. Vol. XLVIII, No. 3, January, 1969.

Fleming, J. Carl. "Pupil Tutors and Tutees Learn Together", Todays Education. No. 58, October, 1969.

Frager, Stanley and Stern, Carolyn. "Learning by Teaching: Fifth and Sixth Graders Tutor Kindergarteners in Pre-reading Skills". Paper read at the International Reading Association Convention, Boston, Mass. 1968.

Hunter, Elizabeth. "Cross-Age Tutoring Program Encourages the Study of Teaching in a College Methods Course", Journal of Teacher Education, Vol. XIX, No. 4, Winter, 1968.

Landrum, John W. and Martin, Mary D. "When Students Teach Others", Educational Leadership. Washington, D.C.: ASCD, Vol. 27, No. 5, February, 1970.

Lippitt, Peggy, and Lohman, John E. "Cross-Age Relationship: An Educational Resource", Children, May-June, 1965.

Lippitt, Peggy. "Children Become Teachers in New School Program", ISR Newsletter. Ann Arbor, Michigan: Institute for Social Research, Autumn, 1969.

Lippitt, Peggy. "Children Can Teach Other Children", The Instructor. Vol. LXXVIII, No. 9, May, 1969.

Lippitt, Peggy, and Eiseman, Jeffrey. Olders and Youngers Project Evaluation. Ann Arbor, Michigan: Institute for Social Research, 1966.

Lippitt, Peggy, and Lippitt, Ronald. "Cross-Age Helpers", NEA Journal. March, 1968.

Lippitt, Peggy. "The Peer Culture as a Learning Environment", Childhood Education. Washington, D.C.: December 1970.

Maniero, John. "Cross-Age Teaching", Unpublished Report to the Ontario-Montclair Board of Education, Ontario, California: 1968-69 and 1969-70.

Melaragno, Ralph J. and Newmark, Gerald. "A Tutorial Community Works Toward Specific Objectives in an Elementary School", Educational Horizons. Washington, D.C.: Pi Lambda Theta Magazine, Vol 48, No. 2, Winter 1969-70.

Owens, T. R., O'Malley, J. M., and Port, A. "Hawaii's Peer Tutoring Experience". Paper presented to the 1970 Annual Meeting of the National Society for Programmed Instruction. May 1970.

"Pint-Size Tutors Learn by Teaching," American Education. Vol. 3, No. 4, April 1967.

Rossi, Timothy P. "HELP: Students Teach Students", Reading Improvement. Oshkosh, Wisconsin: Academia Press, Vol. 6, No. 2, Fall 1969.

Stocking, Susan. "Tutoring by Children Who Need Children", Los Angeles Times: Review. Los Angeles, California: Part IV, December 1970.

Figure 1

Sample Questionnaire

Little Kid's Questions.

Name (optional) _____

Grade _____

Tutor's name (optional) _____

1. Do you like bigger kids helping you?

yes   not sure   no

2. Do you want to work with an older kid again?

yes   not sure   no

3. Did you learn anything?

yes   not sure   no

4. Do you want a boy for a tutor?

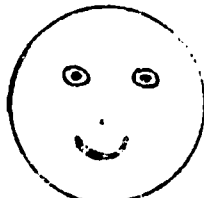yes   not sure   no

5. Do you want a girl for a tutor?

yes   not sure   no