Executive Summary

Evaluation of Experience Corps: Student Reading Outcomes

The Experience Corps (EC) program brings older adults aged 55+ into public elementary schools to tutor and mentor children who are at risk of academic failure. The EC program began in 1995 in five cities and has grown to include 23 sites. Currently, there are nearly 2,000 EC tutors serving approximately 20,000 students. Older adults are recruited to serve in this program and receive training to prepare them for their service assignments, focused on literacy and relationship-building. Each Experience Corps volunteer, or "member," is assigned as part of a team to a local elementary school participating in the program. At the beginning of the school year, teachers refer low-achieving students to the program; and EC members begin regular tutoring with the children.

In 2006, researchers at the Center for Social Development at Washington University's Brown School of Social Work were awarded a grant from The Atlantic Philanthropies to evaluate the effects of the Experience Corps program on student reading outcomes. Mathematica Policy Research, Inc. (MPR) provided data collection services.
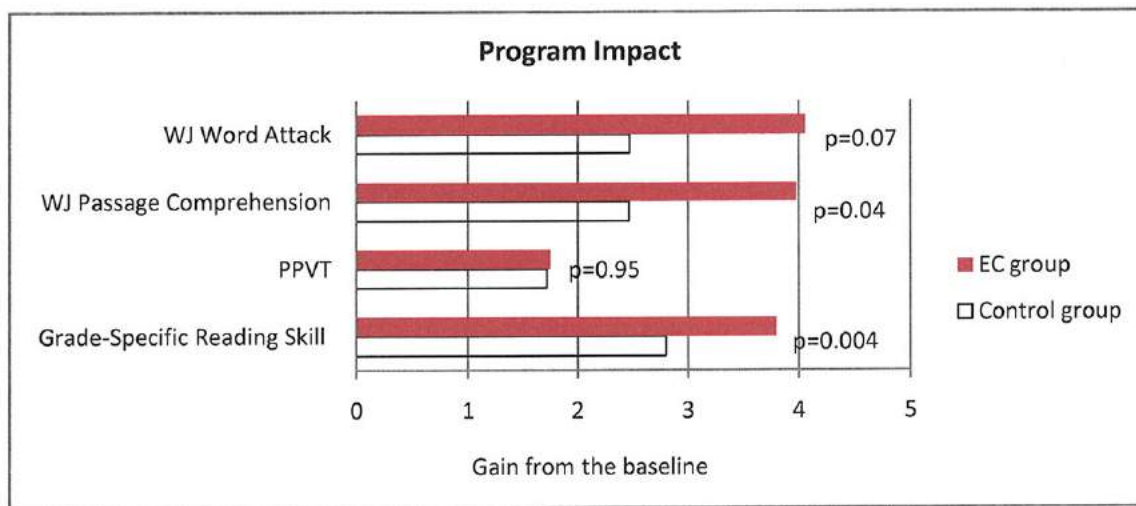
Twenty-three schools in Boston, New York City, and Port Arthur, Texas, participated in the study. A two group, pre-post test design with random assignment was used to assess the effects of the EC program. At the beginning of the school year, teachers referred all students who needed assistance with reading. Students were randomly assigned to the EC program, as there were not enough tutors to serve all of the referred students. Over 1,000 students were referred. Parental consent was obtained on 81% of the referred students, and 883 students were pretested. At posttest, 825 students were reassessed. The EC program tutored 430 of these students, and 451 were in the control group. There were 332 1st, 304 2nd, and 186 3rd graders; 420 males and 402 females in the final dataset.

Data for the study came from three sources: interviews with the students; assessments completed by teachers; and school records. MPR interviewers assessed reading ability at the beginning and end of the school year in face-to-face interviews with the students. Standardized reading tests were used: the Woodcock Johnson word attack subscale (WJ-WA), the Woodcock Johnson passage comprehension subscale (WJ-PC), and the Peabody Picture Vocabulary test (PPVT-III). These widely used measures were chosen because they were not specific to any one of the tutoring curricula used in the participating EC programs, but there was some correspondence between skills assessed by the standardized measures and aspects of the various programs' curricula. At the beginning and end of the academic year, teachers completed assessments of grade-specific reading skills and classroom behavior. At the end of the year, school records were abstracted to ascertain demographics and other student characteristics, and tutors rated the quality of their relationships with the EC students as well as provided their perceptions of student progress.

Analysis of pretest data showed that the EC students and control groups were equivalent on all measured characteristics. Students referred to the EC program were very poor readers and were clearly in need of assistance. From the scores on the WJ-PC measure, we can conclude that half of the students referred to EC perform as low as or lower than 84% of the students their age nationwide, and 12% score worse than 97% of the population.

The EC program succeeded in delivering the intervention to a large number of the students identified for the program. About half of the EC students received 30 to 49 sessions, and the mean number of sessions was 45. Three-quarters of the students received over 35 sessions, which represents about one session a week throughout the program period.

The students in the EC program made statistically greater gain over the academic year on passage comprehension and on assessments of grade-specific reading skills made by the teachers ($p < .05$); and the group difference on word attack was marginally significant ($p < .07$). Gain scores of the experimental and control group are displayed in the following chart. As seen on the graph, over a single school year, students in the EC group made over 60 percent more progress in word attack and passage comprehension and 40% more on grade-specific reading skills.

Program Impact

Measure	p-value
WJ Word Attack	p=0.07
WJ Passage Comprehension	p=0.04
PPVT	p=0.95
Grade-Specific Reading Skill	p=0.004

Legend: ■ EC group □ Control group

Gain from the baseline (x-axis: 0 1 2 3 4 5)

In general, the effects of the program were consistent across subgroups of students. That is, the program impact was the same no matter what the gender, ethnicity, grade, classroom behavior, or English proficiency of the student. However, it is important to note that special education students, operationalized as those with IEPs in the student record, did not benefit from the EC program as much as non-special education students in regards to reading comprehension. EC programming with special education students needs to be reconsidered in light of this finding.

When including only the EC students who received at least 35 sessions, a criterion that we chose to indicate that the students received the intervention as intended, the effects were stronger. The effect sizes associated with the improvement in reading outcomes were .13 to .17.

Teachers overwhelmingly rated the EC program as beneficial to students, and they found that it had no or low burden to them. Tutors perceived that the EC program had a positive impact on students, and their relationships with students were good. Further, tutor relationship was related to reading outcomes, with better relationships associated with better outcomes.

In sum, these findings indicate that the EC program had statistically significant and substantively important effects on reading outcomes.

Appendix A: Overview of EC program in Boston, New York and Port Arthur

	New York	Boston	Port Arthur
Student selection	Teacher referral=>ECLAS score	Teacher referral	Teacher referral
Curriculum	Book Buddies	Reading Coaches	Brigance testing and associated work sheets and materials
Dosage	4 times a week, 45 minute sessions for about 24 weeks; does not factor in student attrition and excessive absences	Two times per week for 40 minutes on average; typically served 45+ sessions; does not factor in absences.	3 days a week, 25-45 minute sessions
Other reading programs in school	Varies school by school/principal choice: Reading Recovery, Voyager; Teachers College (Columbia)	Varies by school/principal: Reading First's/Harcourt curriculum calls for different interventions including "early reading intervention" etc.; Boston Partners PowerLunch; School Specialists/Reading Recovery;	
Volunteer selection	Interview; application and paper work (including writing sample); reference forms; meet with 2 EC staff; background check	Interview, application, two references, background check- including CORI/SORI	Interview; application and paper work; reference forms; background check
Volunteer training	All volunteers get 32 hours of training which includes intro to program, Book Buddies, lesson plans; new volunteers get an additional 16 hours of training	15-20 hours of training for new volunteers: session/classroom observation(s); 1 hour monthly team meetings, on site practice-specific ½ hour	All volunteers receive 30 hours of pre-service training; new volunteers get an additional 5 hours, team leaders 5 – 10 extra hours.
Volunteer stipend	All volunteers receive stipend: $277 a month for AmeriCorps; $256 per month for no cost volunteers	Stipend levels: non-stipended; Part-time stipend is $185; Full time stipend is $278	All volunteers receive $245 a month. Team leaders receive an extra $60 monthly.
Volunteer hours	16 hours per week	Non-stipended- two or more hours Part-time stipend-10 hours Full-time stipend-15 hours	15 hrs per week

What is the EC staff involvement at the school level?	Participate in school events, parent/teacher night; sit in on teacher meetings; meet with principals twice a year	Participate in school- and site-sponsored family outreach events; host EC family/community outreach events; meet with principals formally twice a year, phone check-ins	Participate in school- and district-wide activities. Meet with teachers/principals/counselors; other activities as they are presented
What is the EC staff involvement with the tutors?	Training; provide technical assistance; staff person at each site every day with 10-12 tutors, observe daily and evaluate two times per year	Recruit, train, and manage tutors; site visits at least 3x month; on-site coordinator during program operations	Recruit, train (pre- and in-service), monitor at least two times per month
How do teachers become involved?	Talk with principal; principal will have recommendations for teachers who need tutors; seasoned teachers only	Principal designates which grades participate in which; coordinator provides teachers with appropriate referral forms; new teachers will receive information packet	EC staff makes a presentation at the beginning of the school year to the teachers in service trainings.
What records are kept? How is EC participation tracked?	Attendance, lesson plans; log of students progress; tutors turn in time sheets and sign in daily	Attendance sheet (monthly); each session's content is recorded in session plans that are kept in student files; a log is kept of books completed;	Volunteer hours are documented, daily lesson logs are kept per student.
EC established?	1996	1998	1995
How many EC participants?	140-160	305	50
Grades served?	K-2 mainly, up through 5th (classroom assistance)	K-5	K-3
Other/Lead Agencies associated with EC?	Community Service Society	Generations Incorporated	Southeast Texas Regional Planning Commission
Language	Spanish, French, Haitian Creole	Spanish, Cape Verde Creole, Haitian Creole, Vietnamese	English, Spanish, Vietnamese

Summary and Interpretation of Findings

Students referred to the EC program were very poor readers and clearly in need of assistance. From the scores on the WJ-Passage Comprehension, we can conclude that half of the students referred to EC perform as low as or lower than 84% of the students their age nationwide, and 12% score worse than 97% of the population.

Despite this high level of need, not all the referred students received supplemental assistance. EC had the capacity to serve about half of the referred students, and many control students joined other reading programs (before and after school programs, reading specialist, etc). However, about 30% of the total pool of low-reading students referred to EC did not receive any supplemental reading services over the course of the year. In sum, many students identified as poor readers did not receive any reading assistance outside of normal classroom instruction. EC appears to be a critical part of the network of services available to students who are poor readers.

The students in the EC program made statistically greater gains over the academic year on reading comprehension and on assessments of reading skills made by the teachers (p<.05). Additionally, the gains on word attack were marginally significant (p<.07). The effect sizes associated with these gains are .10, .13, and .16.

To understand the impact of the EC program, we can compare these effect sizes to those of other and various types of reading interventions. Reading Recovery® (RR) is a one-to-one intensive tutoring program, employing certified teachers specifically trained in the intervention. The What Works Clearinghouse (Institute of Education Sciences, 2007) reports effect sizes around .80. The Tennessee Star program reduced class size to improve academic achievement, and the effect size associated with change in reading scores was .26 (Nye, Hedges, & Konstantopoulos, 2000; Mosteller, 1995). Reading First, a national initiative that promotes instructional practices, did not produce a statistically significant impact on reading comprehension for students in 1st through 3rd grades (Gamse, Jacob, Horst, Boulay, & Unlu, 2008). In this context, the magnitudes of the reading improvements associated with the EC program are substantial, given that the intervention is delivered by trained volunteers.

The EC program succeeded in delivering the intervention to a large number of the students. About half of the EC students received between 30 to 49 sessions, and 76% received over 35 sessions. Although program effects were detected in the full sample, including students who received very few EC sessions, program effects were stronger for the subset of EC students who received 35 or more session (.13, .17, .17). These findings suggest that the EC program would be strengthened by attempts to ensure that all students participate in the program at the intended level.

In general, we did not find evidence to suggest that the program was differentially effective with various subgroups of students. This implies that it is not necessary to target on gender, ethnicity, grade, limited English proficiency, or classroom behavior to maximize program impact. However, findings do suggest that EC students with IEPs, indicating special education, made less improvement than non-special needs students in EC on reading comprehension. The program may benefit from reviewing its approaches to special education students and specifying the curriculum, implementing tutoring training, coordinating with school personnel, and implementing monitoring of student performance.

The finding that the New York EC program had a greater effect on word attack skills is not surprising, given the tutoring curriculum that this site utilizes. However, this finding is useful to remind EC program directors that the tutoring curriculum matters. A review of all curricula used across the EC programs nationwide and their alignment with both program and school district goals may be useful.

Teachers overwhelmingly rated the EC program as beneficial to students, while at the same time, they found that it had no or low burden to them. Although these results derived from teachers' overall perception, they are important findings. If teachers do not have positive perceptions of the program and do not feel that it is worth their effort, program effectiveness and sustainability are threatened.

Tutors perceived that the EC program had a positive impact on students, and their overall relationships with students were good. Further, tutor relationship was related to reading outcomes, with better relationships associated with better outcomes. Clearly, an on-going focus on training tutors to interact in positive ways with the students is important. It is instructive to note that in 18% of the tutor-student matches, the tutors rated the relationship with the student as less than good/excellent. Although a minority of the cases, special support and monitoring of these matches may be warranted.

In sum, these findings indicate that the EC program has statistically significant and substantively important effects on reading outcomes. Further, teachers consider the program to be beneficial to students and a low burden to them.