In the summer of 1989, Summer Home Learning Packets in mathematics and language arts were distributed to seventh and eighth graders at Calverton Middle School (Maryland). The packets contained review exercises for students to complete with the help of their parents. In the first of the two studies reported in this document, "Reactions of Parents and Student to Summer Home Learning Packets in the Middle Grades" (Joyce L. Epstein and Susan C. Herrick), students and parents were surveyed concerning their opinions on the packets. Results indicated that families appreciated the school's efforts. Parents and students offered recommendations for improving the packets. In the second study, "Effects of Summer Home Learning Packets on Student Achievement in Language Arts in the Middle Grades" (Joyce L. Epstein and Susan C. Herrick), the effects of the learning packets on students' language skills were examined. An English achievement test was given to sixth graders in the spring of 1990, and again in the fall of the seventh grade, after students had worked on the learning packets during the summer. Results indicated that, in general, students' scores in the posttest were predicted by their scores in the pretest. However, for students who were marginal in skills, the number of packet activities completed in the summer was related to an increased posttest score. Appendixes to the first study include copies of the survey questionnaires and tabulations of survey results. Five references are cited. (EC)
TWO REPORTS: Implementation and Effects
Of Summer Home Learning Packets
In the Middle Grades

Joyce L. Epstein and Susan C. Herrick

Report No. 21
September 1991

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TWO REPORTS: Implementation and Effects
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Grant No. R117 R90002

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Center for Research on Effective Schooling for Disadvantaged Students
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The Center

The mission of the Center for Research on Effective Schooling for Disadvantaged Students (CDS) is to significantly improve the education of disadvantaged students at each level of schooling through new knowledge and practices produced by thorough scientific study and evaluation. The Center conducts its research in four program areas: The Early and Elementary Education Program, The Middle Grades and High Schools Program, the Language Minority Program, and the School, Family, and Community Connections Program.

The Early and Elementary Education Program

This program is working to develop, evaluate, and disseminate instructional programs capable of bringing disadvantaged students to high levels of achievement, particularly in the fundamental areas of reading, writing, and mathematics. The goal is to expand the range of effective alternatives which schools may use under Chapter 1 and other compensatory education funding and to study issues of direct relevance to federal, state, and local policy on education of disadvantaged students.

The Middle Grades and High Schools Program

This program is conducting research syntheses, survey analyses, and field studies in middle and high schools. The three types of projects move from basic research to useful practice. Syntheses compile and analyze existing knowledge about effective education of disadvantaged students. Survey analyses identify and describe current programs, practices, and trends in middle and high schools, and allow studies of their effects. Field studies are conducted in collaboration with school staffs to develop and evaluate effective programs and practices.

The Language Minority Program

This program represents a collaborative effort. The University of California at Santa Barbara is focusing on the education of Mexican-American students in California and Texas; studies of dropout among children of recent immigrants are being conducted in San Diego and Miami by Johns Hopkins, and evaluations of learning strategies in schools serving Navajo Indians are being conducted by the University of Northern Arizona. The goal of the program is to identify, develop, and evaluate effective programs for disadvantaged Hispanic, American Indian, Southeast Asian, and other language minority children.

The School, Family, and Community Connections Program

This program is focusing on the key connections between schools and families and between schools and communities to build better educational programs for disadvantaged children and youth. Initial work is seeking to provide a research base concerning the most effective ways for schools to interact with and assist parents of disadvantaged students and interact with the community to produce effective community involvement.
Table of Contents

Reactions of Parents and Students to Summer Home Learning Packets in the Middle Grades (Joyce L. Epstein and Susan C. Herrick) Report I

Effects of Summer Home Learning Packets On Student Achievement in Language Arts In the Middle Grades (Joyce L. Epstein and Susan C. Herrick) Report II
Abstract

This publication includes two reports. The first report examines the implementation process and reactions of middle grades students and their parents to Summer Home Learning Packets at Calverton Middle School. The activities were designed to provide students with opportunities for continued learning over the summer, to improve parent involvement in their children's education, and to improve school and family communications. An appendix to the report provides the survey and interview materials used with parents, students, and teachers.

After the initial implementation and evaluation, the project team of teachers improved the design and process of implementation and sent the learning packets home again the following summer. The second report explores the effects of the extent of use of the packets on students' skills in language arts when they returned to school in the fall.

The study of the implementation process suggests that families who receive the packets in the mail are highly appreciative of school's efforts and interest in their children. Many suggestions were offered by parents and students to improve the packets that may help other schools save some steps in the design and implementation of similar programs.

The study of effects is exploratory due to limitations in the data. Mainly, students' skills in the fall are predicted by their abilities the prior spring. However, some students -- particularly students who are marginal in skills (e.g., fair students) -- did better than expected in the fall if they completed more school activities over the summer. Both studies confirm that students who work with a parent, rather than alone, complete more home learning activities. Both also confirm that urban middle grades parents are eager to stay involved in their children's education throughout the year, but need clear information from the school's on how to do so.
Acknowledgments

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Reactions of Parents and Students to Summer Home Learning Packets in the Middle Grades

Joyce L. Epstein and Susan C. Herrick
**Introduction**

Calverton Middle School's Parents' and Educators' Network (P.E.N.) has several goals: 1) to improve parent involvement in students' learning; 2) to improve and maintain students' skills over the summer months; and 3) to increase staff awareness of parents' interests in helping their children reach achievement goals. One project designed to help meet these goals is the Summer Home Learning Packets. This report describes the packets, students' and parents' reactions to them, and the implications of their responses for the further development of the program.

The P.E.N. Team met in the summer of 1989 to plan, create and distribute Summer Home Learning Packets. Two packets -- one for math and one for language arts -- were assembled for each of the 7th and 8th grades. The packets included activities that teachers believed would provide students with opportunities to practice useful skills. For the 7th grade, the math packet contained 16 exercises and the English packet contained 11. For the 8th grade, the math packet contained 10 exercises and the English packet contained 11. The English packets were mailed to the families' homes in July and the math packets were sent in August.

Each packet contained a cover letter signed by the principal, the project director, and the parent liaison encouraging parents to set aside about half an hour per week to assist their children in reviewing and practicing some skills in math and English.

**Student and Parent Surveys**

The P.E.N. Project Director met with staff from the Fund for Educational Excellence and The Johns Hopkins University to plan an evaluation of the Summer Home Learning Packets. Two short surveys were designed to obtain students' and parents' responses to the concept and the program.

The Student Survey consisted of 10 questions that asked for 23 items of information about students' reactions to and use of the learning packets. Students also were asked to report how they like school, how their parents are involved in their schoolwork, and how well they do in school.

The Parent Survey consisted of 10 questions that obtained 27 items of information about parents' opinions and ideas about the learning packets.

Parents also were asked to indicate if they wanted more information about specific subjects (e.g., math, English, reading, social studies, science, test skills) in order to help their children reach academic goals, or if they had other questions about Calverton. The parents also were asked about their education, employment, and their children's success in school in order to obtain a brief profile of the parents who participated. Both parents and students were asked to write comments and suggestions about the packets.

Seventh and 8th graders were surveyed at school and questionnaires were sent home to parents (via the students) during the third week of school. The questionnaires and responses for students and parents, respectively, are in Appendices A and B.

**Student Profile**

Approximately 60% of the seventh graders (288 of the 476 enrolled) and 75% of the eighth graders (296 of the 393 enrolled) returned their survey forms. Boys (50.4%) and girls (49.6%) were equally represented in the sample. Some students were not in class when the surveys were distributed and some teachers did not distribute the forms. However, because close to 70% of the 7th and 8th grade students participated, their reports can be considered fairly representative of the Calverton population.

Academic Standing. We asked students to rate their academic abilities. The students rate themselves as mainly average or good students (75%), with 14% saying they were top students and 11% rating themselves as fair or poor students.

We also asked parents to rate the academic standing of their children. The parents who responded rated their children as mainly average or good students (70%), with 6% saying their children were top students and about 24% rating their children as poor or fair.

Because the student and parent surveys were administered independently, the student and parent reports cannot be compared as if they referred to the same students. In rating academic ability, for example, it may be that 1) some students overestimated their abilities; 2) parents rated their children more stringently than the students rated themselves; 3) the better students were more likely to return the survey; or
4) more parents of less successful students returned the survey in hopes of getting more academic help for their children.

Student Attitudes Toward School. Students were asked how they feel about school most of the time. About 20% of the students are very positive about school and schoolwork; 50% are somewhat positive; 20% are somewhat negative; and 10% are very negative about school and schoolwork. About 30% feel that schoolwork is "dull and boring." About 85% report that they "would like to go to college," with 65% saying that this was "very true" for them. Overall, the seventh and eighth grade students like school, are critical of boring classes, and hope to go to college.

Parent Profile

About 21% of the parents of 7th and 8th graders (182 out of a possible 369) returned a completed survey. Of those returning surveys, more were parents of seventh graders than of eighth graders (59% verses 41%, respectively). The parents included 20% who had less than a high school education, 43% who were graduated from high school, and 37% who had some education beyond high school. These parents may be slightly more educated than the general population of Calverton parents. A survey of parents of sixth graders at Calverton in 1987 showed that 27% did not complete high school and 32% had more than a high school education.

More than 60% of the parents who returned the survey (mainly mothers) work outside the home full-time; 13% work part-time, and 26% do not have a job outside the home. The work experience of the parents matched the earlier survey which found that 74% worked full or part-time. Overall, although only 21% returned the survey, the respondents are not dramatically different from the general population of Calverton parents. They are slightly more educated, but had similar work patterns. The children of these families ranged from top to average to poor students.

The Summer Home Learning Packets

Who Received the Packets?

The P.E.N. Team's goal was to reach all families of seventh and eighth graders with at least one of the packets. Approximately three quarters of the students and parents said they received at least one packet during the summer, with close to half of the students (47%) reporting that they received two packets. This means, however, that about 25% of the families did not receive even one packet in the mail.

Parents and students commented that the mailing of the packets needed to be timed better. The August packets arrived just about a week before school started. Parents suggested:*

- It is a good idea, please give them out earlier in the summer.
- My son[s]' summer packets came the day before school, so he didn't have time to do any of the packet.
- I thought summer Home learning packets suppose to arrive at Home during the summer not the week before school opening.

* All parents' and students' comments throughout this report are in their own words.

And one student wrote:

They should have gave it to us in the beginning of the summer

The following results refer to the responses of those who received at least one packet.

Were the Packets Used?

The P.E.N. Team's goal was for all students to complete the activities in the packets. We asked students and parents how many activities they completed, with whom, and what they thought about the packets.

Most parents (91%) and students (72%) who responded said they worked on at least a few of the exercises. Of the students, 28% did none of the activities; 25% worked on from 1 to 4 activities; 15% completed 5 to 6; and 32% completed 7 or more activities. Of the parents reporting, 9% did none of the activities; 37% completed 1 to 4; 31% did 5 to 6; and 23% did 7 or more activities with their children.

Parents and students were asked to respond to the statement, "We had no time this summer to do school work." Most parents (89%) and students (73%) said they did have time to do schoolwork in the summer. This corresponds roughly to the number who said they completed at least some activities in the packets. Parents of better students were somewhat more likely to say they had time in the summer than the parents of less successful students.
However, whether or not parents worked outside the home did not make a difference in how many activities parents completed with their children.

Students were asked whether they worked alone or with someone on the activities. A large proportion of the students (43%) said they worked on the exercises by themselves, and another 32% said that a parent or another adult worked with them at least some of the time. The rest did not use the packets. Students who worked with someone at home or who said they had time for schoolwork in the summer were somewhat more likely to do more of the activities than those who worked alone or those who said they had no time.

The parents who returned a survey were more likely to be those who had worked on activities with their children. The students' responses probably represent a more accurate picture of how much the packets were used. However, even the students' responses may reflect more use than was true for all of the students, due to a possible over-representation of above average students in the group returning the survey.

How Clear was the Purpose of the Packets?

The P.E.N. Team expected the purpose and use of the packets to be clear from the explanation given in the letter that accompanied each packet. In general, the respondents agreed that the packets were easy to read and the work was not too difficult. However, about one third of the students (30%) and parents (33%) said that they "needed more help from the school to know what to do with the packets." These included the students who need the most help with skills during the summer. One girl who rated herself as an average student wrote, "It didn't really have any direction to help someone." Two other students wrote:

Some of it I didn't understand, because whoever wrote them they didn't express some of the things clearly.

Needed easy to follow instructions.

Most students understood the main purpose of the packets:

...I thought it was a good idea because there might be someone who forgot something over the summer and the packets might help.

It help you learn things so when you get back to school you won't forget as much.

It got my mind together for school.

I think they get the students caught on what they didn't last year.

It was good for a study source.

There were students who wondered whether their work would be graded. One student wrote, "... it was a little too hard [and] do I get grades for it?" Others wondered if completing the packets could help them move up a grade. For example, one student asked, "Would I be able to reach my right grade?"

Most parents (93%) agreed that "the packets showed [them] what [their] children are learning in school." Thus, although most students and families completed only a few of the activities, the packets served as a useful contact with parents during the summer and gave them information about their children's curricula in math and English. For some, the summer packets were the parents' first "hands-on" exposure to the skills their children were learning in specific subjects. The parents indicated they would welcome more information about their children's learning activities throughout the year.

What did Parents Think of the Packets?

Just about all parents were enthusiastic about the Summer Home Learning Packets and agreed that they should be sent home every summer. About 60% of the parents agreed strongly with these statements. Parents commented that the packets are a good idea and that they want more and improved activities on more subjects:

Why did it take so long for a good idea like this?

I would like for each child to receive a package for every subject.

I think they should have review packets like this every quarter.

The school should also send packets out on social studies and science.

Some pages were incomplete. The packets could have been put together a little better.

The packets should be more challenging.

There were some parents who questioned giving children homework during the summer months.

In the summer it is their vacation -- they shouldn't have to do school work.

Summer is for fun. But school is for work.

Some parents stated that the packets not only helped their children, but helped them as well.
My child and I agree that these packets should be sent more often than just the summer because it helps my child be prepared after the summer was over and she liked them. By the way, so did I.

The summer packet gave me along with my child a chance to refresh my learning skills and ability.

I think the packets were a great idea. It keep the student and parent in touch with what's going on in school.

Parents did not need to complete many activities with their children to feel that the packets were a good idea that showed them some things that their children were learning. There were, however, some interesting patterns in the parents' responses:

- Parents of seventh graders were slightly more positive about the packets and more likely to think they should be used every summer than were parents of eighth graders. Seventh graders' parents also wrote a larger number of comments and more positive comments about the packets.

- Parents who were less educated were more likely to say that the work in the packets was hard for their children.

- Parents who needed more help to make sense of the packets were less likely to want the packets sent home every summer.

- Regardless of the parents' own education, however, those who felt the packets were easy to read were more positive about the packets.

What did Students Think of the Packets?

Students were considerably less enthusiastic than the parents about the Summer Home Learning Packets. Over 60% of them thought the packets were a good idea, but only 24% agreed strongly with that statement. Quite a few students commented that there should be more packets and more activities during the summer and throughout the school year. For example:

I felt it was a very good idea and I did it (with my parent). Yes you should do it every summer.

They should send one with each report card.

I think they should send more packets every month.

I wish to get packets for all subjects. However, most (58%) of the students thought the packets should NOT be sent home every summer:

It is a good idea but it is our summer vacation and we don't want to do work.

I think that the Summer Home Packets are not a good idea because children want to spend their time having fun.

Some students indicated that the packets did not help them at their particular skill level or in the subjects in which they needed the most practice. They wrote:

[It needs improvement (more skill, that is).]

I didn't know what to do with that packet.

I don't need help in math.

Over 27% questioned whether the skills in the packets would help them with new work in the fall. Two students wrote:

They were easy. I need some harder math.

They should have more and harder problems.

One student suggested: "They should teach what was in the packets at school."

Many students agreed with the students who wrote:

Why are they so long?

They were very boring!

Make them a little more funner.

...they should have fun activity and learning activity as well.

A comparison of 7th and 8th graders' responses revealed that, on the whole, 7th graders were more likely to agree that the packets were a good idea, that they liked the activities, that the activities would help them with new work in the fall, and that the packets should be sent home every summer. The 7th grade packets may have contained more interesting activities or the 8th graders may have been less receptive to the surprise of receiving packets during the summer. Eighth graders were less likely to suggest that packets be sent home every summer, in part, because they would be leaving Calverton for high school.

There was considerable variation in students' reactions to the packets. Their responses were associated
with grade level, gender, ability, and attitudes toward school.

- Seventh graders, females, and students who like school were more positive about the packets, the activities in them, and the suggestion that they be used every summer.
- Students who liked school were more likely to be in favor of the packets.
- Female students completed more activities and were more likely to work with a parent on at least some of them. Girls were more likely than boys to say that a parent can help them with schoolwork at home.

Family-School Connections

Although the main goal of Summer Home Learning Packets is to help students practice skills, a second goal is to help parents become more informed and involved in their children's education. Some of the survey questions asked about practices of parent involvement and whether the school could provide more and better information for parents.

Increasing Information to Parents on How to Help at Home

Most students (91%) reported that if they have a question, their parents know how to help them with schoolwork, with 60% saying that this was "very true." However, nearly all parents (88%) reported that they want more information about how to help their children this year in one or more subjects. The largest number of parents (about 70%) want more information about math. About 50% want to know more about how to help their children with English, reading and test skills. Over 40% of the parents want more information on social studies and science. In addition, about 10% asked about foreign languages, computer skills, physical education, typing and study skills, and other ways they can help their children to be more successful in school. Parents of the less successful students tended to want more information about the major subjects, while parents of the better students were more likely to be the ones who inquired about foreign languages, computer skills, and other activities less related to basic skills.

Regardless of their children's grade level or their own education, most parents who responded to this survey want on-going information about how to help their children at home. Summer packets that identify a few skills in language arts and math may be viewed as one part of an on-going information system that parents would like the school to provide. From other studies, we know that when teachers inform and involve parents in their children's education and encourage students to interact with their parents on schoolwork, the children do better in school.

Changing Student Attitudes About Parent Involvement

Many students (54%) think that their teachers do not "want [them] to talk about school at home." About half of the students say that they do (47%) or do not (53%) like to talk about school at home. Students who said their teachers want them to talk about school at home were more likely to do so, were more likely to say that a parent can help them with schoolwork, and that they liked working on the activities in the Summer Home Learning Packets.

Although parents want to be involved, and some try to be involved, many students believe that their teachers do not support parent involvement. Middle school teachers could take greater advantage of parents' interest and willingness to help if they clearly inform and require their students to talk to their parents about schoolwork, school decisions, homework, or related ideas.

Increasing School Communication with Parents

Parents were asked whether they had any other questions about Calverton's program. Over a quarter (27%) of the parents wrote questions. Clearly, many parents welcomed the opportunity to obtain information and express their concerns. They asked for more information about the curriculum, how to monitor their children's skills and progress, how the school will improve its communications to parents and how parents can more easily communicate with the school. The comments revealed that parents are
very interested in their children’s programs and progress, and rely on the school to help them gauge how their children are doing. One parent put it this way:

As a working parent, I’m unable to attend any meeting held in the A.M. I’d like to see and speak with my son’s teachers frequently. Maybe we can come up with some type of communication other than when there’s a problem.

Another parent wanted: "Whatever information the school will provide to assist us in making this a productive school year for our child."

Parents also had questions about the dress code (14%), bus and meal tickets (8%), security and safety (especially a fear of fighting) (8%), and the PTA (8%). Some parents wrote other questions that they have about Calverton. One parent wanted to know "[w]hy teachers don’t communicate with students more often!"

The P.E.N. team, other teachers, or administrators may want to address some of the following questions (as the parents expressed them) in a regular communication home (perhaps in a school newsletter) that answers a few questions each month. For example:

The Curriculum: "Why hasn’t my child had physical education while at Calverton Middle School?" "...Will my child be able to take a typing class?..." "What language courses are they? can she take French." "Are you going to get computers..."

Grading and Monitoring Student Progress: "...is there a tutors program if she needs it?..." "...Will the children be given extra assignments to build there grades up?" "Would my child be able to reach her right grade?" "Will they be handing out homework logs -- I really like that idea."

Classroom Organization: "What classes are your top or A-1 classes?" "How many students does the school have in all the units?"

Extracurricular Activities: "What type of clubs are you offering this year?" "If there are any extra curricular activities..." "If you will have an ROTC Program in the future." "I am really concerned with the types of movies my child will be watching in school."

Parent Involvement: "Whether or not Parents are allowed to sit in the class during school hours?..." "I would like to have any info on meetings (PTA) or pictures sent early. Not last minute."

Other Concerns: "If the kids could have breakfast served to them in school in the morning." "Are they thinking about getting uniforms in the middle schools? Are [there] enough security to protect the students?" "I would like to know about them getting there bus tickets because I can not afford to send them to school." "When will the children get half days?" "Why do you teachers do nothing about the fights out side -- you need police every day."

If a newsletter or taped message or other communication is put in place to answer questions, parents also should be encouraged to write new questions as they occur throughout the year.

Recommendations to Improve Home Learning Packets

This section summarizes parent and student recommendations on how to improve Summer Home Learning Packets. Some parents (about 32%) and students (17%) wrote comments and suggestions about the Summer Home Learning Packets. Several of the recommendations reflect the difficulties that can be expected when starting a new program like this.

In planning for the future, the P.E.N. Team will want to consider how to design the packets, when to distribute the packets, how to prepare students to receive them, how to explain to students why teachers want them to involve their parents in their work, how to match the activities with the skills needed by the students, how work completed in the summer will be assessed in the fall, and other issues.

Involving parents in learning activities at home is known to be the hardest type of involvement and the one that parents want most of all. It is, therefore, worth working to improve and extend home learning.

How Should Involvement of Parents Be Encouraged?

Over 40% of the students did the activities in the packets on their own. To encourage more interaction between students and parents, future packets could include clear instructions to parents and students about how to conduct and discuss the activities, and specifically designed activities that require interaction and that can be completed only by a student and parent working together.
What Should the Packets Contain?

Many parents and students suggested that the packets also include other subjects, especially social studies and science.

Some students asked for activities that were better tailored to their level of learning and that include specific skills they need to practice. Should the activities mainly review material or should they also include exercises which prepare the students for new work?

How can Learning, Fun, and Challenge be Combined?

The concept of Summer Home Learning activities could be extended to include community and cultural activities for students and families to attend, such as concerts, art fairs, baseball games, and other events that students could record and write about. Reading, cooking, shopping, and other projects and experiences could be encouraged in ways that link school skills to family life during the summer.

When Should the Summer Packets be Distributed?

Summer packets should be mailed early enough so that parents and students have enough time to complete them. The home learning packets might be scheduled to arrive at the beginning of July and at the beginning of August.

In order to save mailing costs, the P.E.N. Team might consider a couple of alternatives. Both packets could be mailed together at the beginning of the summer, with activities clearly labeled in order to space work over the two summer months. Or, Summer Learning Packets could be issued to parents at an end-of-the-school-year conference, or along with a final "report card" pickup. The skills for the summer could be tailored to meet the individual needs of students.

More students would be ready to complete the activities if they were told before leaving school in June that the packets would be arriving, what they would contain, what the students were expected to do, and why.

How Should the School Follow-Up on the Packets in the Fall?

Teachers also need to discuss with students whether and how the work will be graded in the fall. Should the packets be collected? Rewarded? Graded? Might students be encouraged to make greater use of the packets by receiving credit for them? Before they leave school for the summer, students should have a clear understanding of the goals, consequences, and responsibilities associated with the packets.

How can Program Planning be Improved?

The Calverton P.E.N. Team and other teachers may want to establish a schedule of procedures in order to plan their program for the end of the school year. Along with the necessary schedule, responsibilities must be outlined to:

1) Collect or design activities for the next packets. (Responsibility: All teachers of subjects selected for the packets.)

2) Review the collected activities and select the best ones for each subject and for students' different needs and levels of learning. (Responsibility: P.E.N. Team and other interested teachers to develop criteria for selection.)

3) Prepare the summer packets in time to discuss them with students before they leave school in June. (Responsibility: All teachers of present sixth and seventh graders who will receive the summer packets.)

4) Mail them early in July. (Responsibility: P.E.N. Team.)

How Could the Program be Expanded?

The results of the surveys suggest that parents at Calverton are interested in their children's academic development and are willing to work with the school and teachers to help their children with schoolwork - even during the summer. Many parents and students requested home learning activities during the school year.

One next step in reaching the P.E.N. Team's goal of greater parent involvement in students' skill development may be to increase the coverage and frequency of interactive assignments. Questions to consider are: How can the packets be developed further to give parents a greater understanding of the curriculum as part of a continuing relationship between staff and parents, rather than a one- or two-time occurrence? How often should teachers send home learning activities that involve parents in the skills their children are learning? In what subjects? The Calverton P.E.N. Team and teachers may be able to develop homework activities in every subject at regular intervals (for example, at least once or twice a month) that require students to talk about their work with someone at home, or that parents and students can work on together in interesting ways.

More Specific Evaluations of Effects on Student Learning. One question that could not be answered in this study was whether and how the packets helped students academically. Did students
7. Please tell what YOU think. (Circle one choice on each line...)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes!</th>
<th>yes</th>
<th>no</th>
<th>NO!</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the Summer Packets a good idea?</td>
<td>23.9%</td>
<td>41.8%</td>
<td>15.4%</td>
<td>19%</td>
<td>553</td>
</tr>
<tr>
<td>Should the school send home learning packets every summer?</td>
<td>19.4%</td>
<td>22.6%</td>
<td>25.4%</td>
<td>32.6%</td>
<td>552</td>
</tr>
</tbody>
</table>

8. Do you have any other comments about the Summer Home Learning Packets?

- No comment: 81.9%
- One comment: 14.6%
- Two comments: 3.6%
  (N=591)

- Negative: 58.9%
- Neutral: 4.7%
- Positive: 29.9%
- Both: 6.5%
  (N=107)

- General comment: 37.4%
- "Summer is for fun": 17.8%
- "Long, hard, boring": 17.8%
- Good preparation for school: 14.0%
- Cover skills in school: 10.3%
  (N=107)

9. How do you feel about school most of the time? (Circle one choice on each line...)

<table>
<thead>
<tr>
<th>Question</th>
<th>Very True</th>
<th>Mostly True</th>
<th>Mostly False</th>
<th>Very False</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like school.</td>
<td>18.5%</td>
<td>52.2%</td>
<td>18.5%</td>
<td>10.8%</td>
<td>563</td>
</tr>
<tr>
<td>Schoolwork is dull and boring to me.</td>
<td>10.3%</td>
<td>20.6%</td>
<td>50.3%</td>
<td>18.8%</td>
<td>563</td>
</tr>
<tr>
<td>I like to talk about school at home.</td>
<td>15.8%</td>
<td>31.1%</td>
<td>27.6%</td>
<td>25.5%</td>
<td>533</td>
</tr>
<tr>
<td>I would like to go to college.</td>
<td>64.6%</td>
<td>20.2%</td>
<td>9.5%</td>
<td>5.7%</td>
<td>560</td>
</tr>
<tr>
<td>At home, a parent knows how to help me on schoolwork.</td>
<td>60.1%</td>
<td>31.2%</td>
<td>5.7%</td>
<td>3.0%</td>
<td>561</td>
</tr>
<tr>
<td>My teachers want me to talk about school at home.</td>
<td>19.7%</td>
<td>26.2%</td>
<td>29.3%</td>
<td>24.7%</td>
<td>542</td>
</tr>
</tbody>
</table>

10. In most classes, I am... (N=560)

- 13.9% A Top Student
- 42.9% A Good Student
- 32.1% An Average Student
- 10.9% A Fair Student
- .2% A Poor Student
Dear Student:

Please take a few minutes to give us your ideas about the Calverton Summer Home Learning Packets. We will use your ideas to plan our projects. Thank you very much.

Mr. Richard Holley, Principal
The P.E.N. Team, and Your Teachers

1. What grade are you in this year? (CIRCLE one...)  Grade  6  7  8

2. Are you ... (Circle one...)  MALE  FEMALE

3. Did you receive the Calverton Summer Home Learning Packets in the mail? (Check one)...

   _____ No ---> Please GO TO QUESTION 7
   _____ Yes, one packet on ENGLISH
   _____ Yes, one packet on MATH
   _____ Yes, TWO packets
   _____ Not sure

4. How many activities did you do? (Circle one ...)

   NONE  1-2  3-4  5-6  7 or more

5. If you DID some activities, did you work alone or with a parent? (Check one...)

   _____ To be honest, I did not use the packets
   _____ I worked on the packets by myself
   _____ I worked with a parent or another adult
   _____ I worked by myself on some and with a parent on some

6. Please circle one choice for each statement to tell if you agree or disagree.

<table>
<thead>
<tr>
<th>What Do You Think?</th>
<th>AGREE A LOT</th>
<th>DISAGREE A LOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>disagree</td>
<td></td>
</tr>
<tr>
<td>disagree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I liked working on the activities.

I needed more help from the school to know what to do with the packets.

The booklets were easy to read.

The work was too hard.

The packets will help me with new work this fall.

I had NO time this summer to do school work.
7. Please tell what YOU think. (Circle one choice on each line...)

Are the Summer Packets are a good idea? YES! yes no NO!

Should the school send home learning packets every summer? YES! yes no NO!

8. Do you have any other comments about the Summer Home Learning Packets?

9. How do you feel about school most of the time? (Circle one choice on each line...)

<table>
<thead>
<tr>
<th></th>
<th>VERY TRUE</th>
<th>Mostly true</th>
<th>Mostly false</th>
<th>VERY FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like school.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
<tr>
<td>Schoolwork is dull and boring to me.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
<tr>
<td>I like to talk about school at home.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
<tr>
<td>I would like to go to college.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
<tr>
<td>At home, a parent knows how to help me on schoolwork.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
<tr>
<td>My teachers want me to talk about school at home.</td>
<td>TRUE</td>
<td>true</td>
<td>false</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

10. In most classes, I am... (Check one)

   _____ A Top Student
   _____ A Good Student
   _____ An Average Student
   _____ A Fair Student
   _____ A Poor Student

THANK YOU VERY MUCH!!

19
Appendix B -- Results from Parents

CALVERTON'S Parents and Educators SUMMER HOME LEARNING NETWORK PACKETS
(N = 182 PARENTS)*

1. Did you receive the Calverton Summer Home Learning Packets in the mail? (N=178)
   
   21% No ---> Please GO TO QUESTION 4
   28% Yes, One packet
   48% Yes, Two packets
   4% Not sure

2. Please tell us your opinions of the Summer Home Learning Packets. (Circle one choice on each line...)

<table>
<thead>
<tr>
<th>What Do You Think?</th>
<th>AGREE A LOT</th>
<th>agree</th>
<th>disagree</th>
<th>DISAGREE A LOT</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Summer Packets are a good idea.</td>
<td>63.4%</td>
<td>33.1%</td>
<td>2.8%</td>
<td>.7%</td>
<td>142</td>
</tr>
<tr>
<td>My child and I liked working on the activities.</td>
<td>36.8%</td>
<td>54.9%</td>
<td>6.8%</td>
<td>1.5%</td>
<td>133</td>
</tr>
<tr>
<td>My child and I needed more help from the school to know what to do with the packets.</td>
<td>15.1%</td>
<td>18.0%</td>
<td>43.9%</td>
<td>23.0%</td>
<td>139</td>
</tr>
<tr>
<td>The booklets were easy to read.</td>
<td>51.5%</td>
<td>42.4%</td>
<td>5.3%</td>
<td>.8%</td>
<td>132</td>
</tr>
<tr>
<td>The work was too hard for my child.</td>
<td>.7%</td>
<td>6.4%</td>
<td>48.6%</td>
<td>44.3%</td>
<td>140</td>
</tr>
<tr>
<td>We had no time this summer to do school work.</td>
<td>2.9%</td>
<td>8.6%</td>
<td>50.4%</td>
<td>38.1%</td>
<td>139</td>
</tr>
<tr>
<td>The packets showed me what my child is learning in school.</td>
<td>48.1%</td>
<td>45.2%</td>
<td>5.9%</td>
<td>.7%</td>
<td>135</td>
</tr>
<tr>
<td>The school should send home learning packets every summer.</td>
<td>58.6%</td>
<td>34.3%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>140</td>
</tr>
</tbody>
</table>

* Other N's listed next to questions indicate the number of parents who provided useable information, if fewer than 182.
3. About how many activities did you do with your child? (Circle one ...)

<table>
<thead>
<tr>
<th></th>
<th>NONE</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.8%</td>
<td>21.2%</td>
<td>10.1%</td>
<td>30.7%</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

4. Do you have any other comments about the Summer Home Learning Packets?

<table>
<thead>
<tr>
<th>Comment Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comment</td>
<td>68.1%</td>
</tr>
<tr>
<td>One comment</td>
<td>24.2%</td>
</tr>
<tr>
<td>Two comments</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>(N=182)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>17%</td>
</tr>
<tr>
<td>Neutral</td>
<td>5%</td>
</tr>
<tr>
<td>Positive</td>
<td>70%</td>
</tr>
<tr>
<td>Both</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>(N=58)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General comment</td>
<td>37.9%</td>
</tr>
<tr>
<td>More challenge</td>
<td>24.1%</td>
</tr>
<tr>
<td>More packets</td>
<td>15.5%</td>
</tr>
<tr>
<td>Helped parent and child</td>
<td>12.1%</td>
</tr>
<tr>
<td>Better timing of delivery</td>
<td>10.3%</td>
</tr>
<tr>
<td></td>
<td>(N=58)</td>
</tr>
</tbody>
</table>

5. What subjects do you want more information about to help your child this year? (N=161)

- Math: 68.9%
- English: 50.9%
- Reading: 47.8%
- Social Studies: 44.7%
- Science: 41.6%
- Test Skills: 52.8%
- Other: Foreign Language, Gym/Phys Ed, Business Ed, Computer Skills, Typing, Study Skills: 10.4%

6. What else do you want to know about Calverton this year?

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No request</td>
<td>72.5%</td>
</tr>
<tr>
<td>One request</td>
<td>22.5%</td>
</tr>
<tr>
<td>Two requests</td>
<td>4.9%</td>
</tr>
<tr>
<td></td>
<td>(N=182)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>12%</td>
</tr>
<tr>
<td>Neutral</td>
<td>58%</td>
</tr>
<tr>
<td>Positive</td>
<td>24%</td>
</tr>
<tr>
<td>Both</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>(N=50)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring Skills</td>
<td>22%</td>
</tr>
<tr>
<td>Communications</td>
<td>16%</td>
</tr>
<tr>
<td>Curriculum</td>
<td>14%</td>
</tr>
<tr>
<td>Dress Code</td>
<td>14%</td>
</tr>
<tr>
<td>Security, services, PTA</td>
<td>10.3%</td>
</tr>
<tr>
<td></td>
<td>(N=50)</td>
</tr>
</tbody>
</table>

7. What grade is your child in at Calverton this year? (N=170)

- Grade 7: 58.8%
- Grade 8: 41.2%

8. In school my child is ....(N=168)

- 6.0% A TOP student
- 29.2% A GOOD student
- 41.1% An AVERAGE student
- 23.2% A FAIR student
- 0.6% A POOR student

9. What is your education? (N=162)

- 19.8% Did not complete high school
- 43.2% completed high school
- 37.0% beyond high school

10. Do you work outside the home? (N=161)

- 60.9% Full-time job
- 13.0% Part-time job
- 26.1% Work at home
Dear Parent or Guardian:

Please take a few minutes to give us your ideas about the Calverton Summer Home Learning Packets. We will use your ideas to plan our projects.

Your child should RETURN this sheet to school on the NEXT SCHOOL DAY. Thank you very much.

Mr. Richard Holley, Principal, and Calverton's P. E. N. Team of Teachers

1. Did you receive the Calverton Summer Home Learning Packets in the mail? (Check one..)
   - _____ No ---> Please GO TO QUESTION 4
   - _____ Yes, one packet on ENGLISH
   - _____ Yes, one packet on MATH
   - _____ Yes, TWO packets
   - _____ Not sure

2. Please tell us your opinions of the Summer Home Learning Packets. (Circle one choice on each line...)

<table>
<thead>
<tr>
<th>What Do You Think?</th>
<th>AGREE A LOT</th>
<th>agree</th>
<th>disagree</th>
<th>DISAGREE A LOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Summer Packets are a good idea.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>My child and I liked working on the activities.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>My child and I needed more help from the school to know what to do with the packets.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>The booklets were easy to read.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>The work was too hard for my child.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>We had no time this summer to do school work.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>The packets showed me what my child is learning in school.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
<tr>
<td>The school should send home learning packets every summer.</td>
<td>AGREE</td>
<td>agree</td>
<td>disagree</td>
<td>DISAGREE</td>
</tr>
</tbody>
</table>
3. About how many activities did you do with your child? (Circle one ...)
   NONE  1-2  3-4  5-6  7 or more

4. Do you have any other comments about the Summer Home Learning Packets?

________________________________________________________________________
________________________________________________________________________

5. What subjects do you want more information about to help your child this year. (Check all that apply ...)
   ____ Math
   ____ English
   ____ Reading
   ____ Social Studies
   ____ Science
   ____ Test Skills
   ____ Other (describe)

6. What else do you want to know about Calverton this year?

________________________________________________________________________
________________________________________________________________________

7. What grade is your child in at Calverton this year? (Circle one...) Grade  6  7  8

8. In school my child is ....(Check one ...)
   ____ A TOP student
   ____ A GOOD student
   ____ An AVERAGE student
   ____ A FAIR student
   ____ A POOR student

9. What is your education? (Check one ...)
   ____ did not complete high school
   ____ completed high school
   ____ beyond high school

10. Do you work outside the home? (Check one ...)
    ____ Full-time job
    ____ Part-time job
    ____ Work at home

   THANK YOU VERY MUCH!!

Please ask your child to RETURN this sheet to Calverton on the NEXT SCHOOL DAY.
Effects of Summer Home Learning Packets
On Student Achievement in Language Arts
In the Middle Grades

Joyce L. Epstein and Susan C. Herrick
Introduction

For many teachers, the "bottom line" of school and family connections is whether the activities increase student learning and success in school. Many studies report a connection between parent involvement and student achievement (see Henderson's 1990 annotated review of this work). Some link teachers' practices of involving parents with students' gains in achievement test scores (Epstein, 1991).

There is general agreement across studies that family involvement is important, that all families can be assisted by schools to become more knowledgeable partners in their children's education, and that positive family involvement can help students improve their achievement and other school behaviors. We still lack clear information, however, on the effects of specific practices of parent involvement.

Without information about likely results of particular approaches, educators designing new programs or policies for improving parent involvement are at a real disadvantage. They need to know which activities actually lead to improved achievements, attitudes, or behaviors of students. Without clear linkages of practice and effects, educators, policy leaders, and parents will continue in the misperception that any parent involvement leads to improved achievement or that any practice is as good as any other.

In fact, different types of involvement lead to different outcomes for students, for parents, and for teaching practice (see Brandt, 1989). For example, practices that involve parents in students' learning activities at home help students develop better attitudes toward school work, greater homework completion, and higher achievement in practiced skills. Studies are needed that further confirm these results and identify other effects of specific practices.

In one effort to involve parents in their children's education, the Calverton Middle School Parents and Educators Network (PEN) Team developed Summer Home Learning Packets. Issued in two successive summers, the workbook-like packets contained language arts and math activities both years, and science and health activities the second year. They were designed to maintain and improve students' skills over the summer months and to increase parent involvement in students' skill development.

First Questions. The first study of the Summer Home Learning Packets assessed the school's success in implementing the project and parents' and students' attitudes, use, and recommendations for improvement of the packets (Epstein and Herrick, 1991). Results of the evaluation of the implementation of the program showed that parents were positive about the packets, appreciated the staff's efforts to inform them about their children's curriculum, and supported the packets' continued use. Compared to parents, students were less enthusiastic about having school work during their summer vacation, but, overall, recommended the packets be continued and suggested that the exercises should be more fun, more challenging, and linked to their schoolwork in the fall.

Other suggestions were made to improve the distribution of the packets, including letting parents and students know about them in advance, and to improve the design of the activities -- particularly tailoring them to students' levels of learning and including specific skills that students need to practice. The first evaluation also increased teachers' awareness of parents' interests in helping their children reach achievement goals.

For the second study, the PEN Team met in the spring of 1990 to prepare an improved set of Summer Home Learning Packets to be mailed home in June and July to the students who would be seventh and eighth graders in the fall. Each packet included activities in language arts, math, science, and health.

Next Questions. One question that could not be answered in the first evaluation was whether and how well the packets helped students academically. The question remains: Do students improve or maintain certain skills as a result of completing activities over the summer? With routines for producing the packets in place, the PEN Team decided to conduct an initial test of the effects of the packets on students' skills, with the assistance of the project staff at the Fund for Educational Excellence and The Johns Hopkins University.

In May, 1990, teachers alerted their students to look forward to the packets, explained why they were important, and informed the students that they would be tested on the skills in the packets in September. The students were given a flyer to deliver to their parents in early June explaining that they would receive the summer learning packets in the mail.
Each packet included a cover letter signed by the principal, the project director, and the parent liaison encouraging parents to assist and encourage their children to complete the activities in the packets during the summer. The cover letter accompanying the July packet mentioned that the students would be tested in September and that the test grades would be part of the students' first marks for the term.

Each activity included the objective and directions, an example, two practice exercises, and a test with an answer key for students to check their mastery of the skills. The last page of the July packet was a questionnaire about the packets for parents to fill in and return to school via the students in September.

An initial assessment of effects would require a pretest or a measure of starting skills, one or more measures of student use of the packets, and a posttest of skills mastered. The spring California Achievement Test (CAT) scores in reading and language arts and course grades in English were used as pre-test indicators of students' levels of academic achievement prior to the use of the Summer Home Learning Packets. Students' race, gender, absenteeism record, spring CAT scores in reading and language arts, and average grades for English courses for the 1989-1990 school year were obtained from school records. The PEN Team and teachers administered post-tests to the students in the fall which assessed some of the skills that appeared in the June and July packets. Included at the end of each test were two questions about students' use of the summer packets and their parents' involvement.

The main questions of this evaluation are: Which students use the summer packets more? Which students work more with a parent? Does working with a parent boost packet use and student's skills? What contributes to a good post-test score? Do students who do more activities in the summer packets score higher in the fall on skills that were in their packets?

### Student Characteristics

#### Sample

The largest number of post-tests were obtained from 7th grade English teachers. Thus, we focus attention in this assessment on the effects of uses of the Summer Packets on mastery of English skills. Nine seventh-grade English classes (N=244 students) whose teachers completed the administration of the post-tests were included in this study. This sample includes 64% of the 384 seventh graders enrolled, as of November 30, 1990. The remainder of seventh graders not in the sample include students in special education classes, students in classes in which post-tests were not administered or returned, and students who did not take the post-tests due to absence or other reasons.

The packets for incoming seventh grade students contained language arts activities on differentiating fact from opinion; punctuation; synonyms; multiple definitions; antonyms; writing a friendly letter in the proper format and identifying its parts (e.g., heading, salutation, etc.); distinguishing sentence fragments and run-on sentences, and making inferences. The packets also contained activities in math, science, and health.

#### Race and Gender

The sample is 46% male and 54% female, and is racially homogeneous (99% African American). Boys were slightly underrepresented and girls were somewhat overrepresented in this sample, compared to the composition of the total population of seventh graders (55% boys and 45% girls).

#### Absenteeism

The absentee rate in the prior school year, used as an indicator of students' basic involvement or commitment, was calculated for each student by dividing days absent by days enrolled. Most students (95%) were enrolled for the entire 180 days of the school year. Students' rates of absence in the prior school year varied greatly, from no absences up to 144 days. On average, students were absent 10% of the time enrolled.

#### Measures of Baseline Ability

California Achievement Test scores in reading and language arts in Spring 1990 and report card grades for English courses for the 1989-1990 school year were obtained from school records as measures of student baseline ability. Table 1 shows the means, ranges, and standard deviations for these measures.

For example, student scores on the California Achievement Test in reading averaged at the 42nd percentile, ranging from below the first percentile (2) to above the 90th percentile (93.8). Converting the CAT test scores to grade equivalents, the average 6th grader reads at about the sixth grade level, but the sample ranged in skills from below the first grade to above the eleventh grade equivalent. Most students (68%) ranged from 4.6 to 8.6 grade equivalents.

In sum, the table shows that most of the students in the sample are below average in reading and language skills as measured on the standardized tests. Students' report card grades in English during the 1989-90 school year ranged from 50% (failing) to over 90%, with most students passing their classes.
Table 1
Students' Pre-Test Scores on Reading and Language CAT and English Report Card Grades, Spring 1990.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Range</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading CAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentiles (N=221)</td>
<td>42.4</td>
<td>.2</td>
<td>18.6</td>
</tr>
<tr>
<td>Reading Grade Equivalent</td>
<td>6.2</td>
<td>.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Language CAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentiles (N=221)</td>
<td>47.5</td>
<td>2.0</td>
<td>20.3</td>
</tr>
<tr>
<td>Language Grade Equivalent</td>
<td>6.6</td>
<td>3.1</td>
<td>2.0</td>
</tr>
<tr>
<td>English Report Card Grade (%)</td>
<td>74.1</td>
<td>50.0</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Gender Differences. Girls tended to have better report card grades in English, but did not do significantly better than boys on their CATs in Language or Reading.

Absenteism. Absenteeism had a negative association with achievement. The more students were absent, the less likely they were to do well on achievement tests or report card grades.

Analyses of Students' Use of the Packet.

Table 2 shows the percent of activities in all subjects completed in each of the packets reported by the students. About 58% of the students reported working on some activities in the June packet and about 50% reported working on some in July. Some students received the packet but reported doing none of the work. Others reported that they did not receive the packets or gave no information about receiving or doing the activities.

Table 2
Percent of Students Reporting the Number of Activities Completed in Summer Home Learning Packets (N=244)

<table>
<thead>
<tr>
<th>Number of Activities Done</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>15.2</td>
<td>17.6</td>
</tr>
<tr>
<td>1 or 2</td>
<td>19.7</td>
<td>17.2</td>
</tr>
<tr>
<td>3 to 5</td>
<td>10.2</td>
<td>9.4</td>
</tr>
<tr>
<td>6 or more</td>
<td>27.9</td>
<td>23.8</td>
</tr>
<tr>
<td>Did not receive packet</td>
<td>18.9</td>
<td>20.1</td>
</tr>
<tr>
<td>No information</td>
<td>8.2</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Other analyses showed that of the 161 students who received both the June and July packets, 28 (17%) did none of the activities in either packet; 22 (14%) completed one or two in only one of the packets and none in the other; 30 (19%) completed one or two in each; and 72 (45%) completed three or more in each. Overall, packet use was low. In the two packets there were over two dozen activities, yet about half the students (54%) who received the packets completed five or fewer activities in all. Students' uses of the packets tended to be consistent throughout the summer. Those who did more activities in June tended to do more in July.

Parent Involvement

Students were asked, "How many of the summer packet activities did you do with a parent?" The responses were: None, A Few, Some, Most, or All. Table 3 shows that more than half of the students who received packets reported working with a parent over the summer on at least a few activities. Almost a quarter (22%) of the students worked with a parent on most or all of the activities that they completed.

Table 3
Number of Activities Done with a Parent

<table>
<thead>
<tr>
<th>Number of Activities Done</th>
<th>% Students (N=174)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>41</td>
</tr>
<tr>
<td>A Few</td>
<td>24</td>
</tr>
<tr>
<td>Some</td>
<td>13</td>
</tr>
<tr>
<td>Most</td>
<td>13</td>
</tr>
<tr>
<td>All</td>
<td>9</td>
</tr>
</tbody>
</table>

*Students who received at least one packet and gave information.

The number of activities done in the summer was clearly linked to parent involvement. When students worked with a parent, they were significantly more...
worked with a parent, they were significantly more likely to do more of the activities in the packets than students who worked alone. Importantly, this was true for students at all academic levels. Table 4 shows the percent of students who did or did not work with a parent and who completed none, one to two, three to five, or six or more packet activities. Of the students who did not work with a parent, over one third did no activities. Of those who worked with a parent, 67% completed six or more activities compared to 42% of students who did not work with a parent.

Table 4
Number of Activities Students Completed Working with or without a Parent (N=165)*

<table>
<thead>
<tr>
<th>Student work with parent?</th>
<th>Total number of activities completed</th>
<th>No (n=66)</th>
<th>Yes (n=99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>36%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>1 to 2</td>
<td>8%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>3 to 5</td>
<td>14%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>6 or more activities</td>
<td>42%</td>
<td>67%</td>
<td></td>
</tr>
</tbody>
</table>

*Received at 1st one packet and gave information.

Attendance. Having good attendance increased the likelihood of doing more of the packet activities. Students -- especially girls -- who attended school more during the prior school year tended to do more school work during the summer and to work more with their parents.

Students' Academic Standing. Students' pre-test abilities as measured by the CAT reading and language arts tests or report card grades in English did not influence whether or not they worked on the packets or whether they worked with a parent.

Gender Differences. Girls were significantly more likely to do more of the activities than boys. Even after taking the effects of absence and academic achievement on packet use into account, girls still were more likely to use the packets than boys.

Thus, being female, having better attendance, and working with a parent each contributed to completing more of the activities in the packets. The more motivated students (not necessarily the students who had better achievement test scores) worked more on the summer packets.

Analyses of Students' Post-Test Performance

Four post-tests in language arts measured students' abilities 1) to organize and 2) to identify the parts of a friendly letter; 3) to distinguish among full sentences, sentence fragments, and run-on sentences; and 4) to properly punctuate phrases and identify punctuation marks by name.

Table 5 shows the distribution of students' post-test scores on the four skills. Most students demonstrated mastery of the organization of friendly letters with 85% passing Test 1 and nearly 70% being able to name the parts of an informal letter in Test 2. In contrast, only 39% passed the quizzes on sentence fragment identification and 18% passed the punctuation quiz. Clearly, most students had not mastered these two skills. A total score was calculated for the four skills on the post-tests. Results showed that students' Overall Skill Scores ranged from 3 points to 26 points (out of 26 points). About 37% of the students obtained a passing Overall Skill Score.

As with the pre-tests, results varied according to student characteristics and practices. Girls scored higher on all of the post-tests and particularly on the punctuation quiz which most students failed. The more students were absent, the less likely they were to do well on the post-tests.

Table 5
Percent of Students Passing and Failing Four Post-Tests (N=244)

<table>
<thead>
<tr>
<th>Test</th>
<th>Zero</th>
<th>Failing*</th>
<th>Passing**</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly letter, Test 1</td>
<td>7.4</td>
<td>7.4</td>
<td>42.3</td>
<td>43.0</td>
</tr>
<tr>
<td>Friendly letter, Test 2</td>
<td>15.2</td>
<td>15.6</td>
<td>16.0</td>
<td>53.3</td>
</tr>
<tr>
<td>Sentence Fragments</td>
<td>13.5</td>
<td>47.6</td>
<td>18.9</td>
<td>20.1</td>
</tr>
<tr>
<td>Punctuation</td>
<td>26.2</td>
<td>55.6</td>
<td>14.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Overall Skill Score</td>
<td>0</td>
<td>63.5</td>
<td>35.7</td>
<td>.8</td>
</tr>
</tbody>
</table>

*Includes all scores from 1% through 64% **Includes all scores from 65% through 99%
Student Achievement and the Summer Home Learning Packets

In this section, the information on students' prior achievements, packet use, and overall post-test scores are used to address the following questions: What contributes to a good post-test score? Do students who do more summer packet activities score higher in the fall on skills that were in their packets? Do students who work with a parent do better in the fall on the post-tests?

Three results are important for understanding whether work on Summer Home Learning Packets positively affected student achievement in the fall. The first is the positive association between the number of activities completed and students' overall post-test scores: The more activities completed the higher the overall post-test score (Pearson correlation=.16).

The second result is the positive association between students' starting abilities in the spring and their post-test scores in the fall: Students with higher spring English grades were still better language arts students in the fall (Pearson correlation=.33).

The third result is the independent effect of the number of activities completed on post-test scores for some students, after controlling for starting skills. Overall, there was no significant independent effect of packet use on fall scores, after students' prior (spring) scores were taken into account. This general result, however, masks a potential interaction effect of starting skill and packet use. That is, some students showed achievement gains by completing more of the summer activities, whereas other students' skills were not influenced by packet use.

Table 6 reports the distribution of post-test Overall Skill Scores (evenly divided among low, medium, and high) for poor, fair, good, and better students (based on quartiles of report card grades in English for the previous year), for students with low and high packet use.

Table 6. Percent of Students' Post-Test Scores by Prior Skills and Packet Use

<table>
<thead>
<tr>
<th>PRIOR SKILLS*</th>
<th>Poor Packet Use</th>
<th>Fair Packet Use</th>
<th>Good Packet Use</th>
<th>Better Packet Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Scores</td>
<td>Low (n=23)</td>
<td>High (n=19)</td>
<td>Low (n=22)</td>
<td>High (n=18)</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>47</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td>Medium</td>
<td>30</td>
<td>11</td>
<td>23</td>
<td>56</td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>42</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>p&lt;.12</td>
<td>p&lt;.05</td>
<td>p&lt;.48</td>
<td>p&lt;.10</td>
</tr>
</tbody>
</table>

* In quartiles based on report card grades for one English course for 1990-1991 school year for students who received at least one packet. N= 168.

Poor students (in the lowest quartile on prior English grades) tended to continue to score low in the fall, but a substantial number of poor students (42%) who had high use of the packets scored high on their post-tests (p<.12). Thus, although high packet use did not help all poor students master language arts skills, some clearly benefitted and improved their skills.

Among fair students (in the third quartile on prior English grades), using the packets helped them maintain their skills. The 56% who were high packet users attained mid-level scores on the post-tests, compared to 23% who were low-packet users. In contrast, about 50% who were low packet users obtained low post-test scores (p<.05).

Good students (in the second quartile on prior English grades) tended to remain average or good students regardless of packet use (p<.48). There was no significant pattern of packet use on post test scores for these students. In contrast, better students (in the top quartile in prior English grades) benefitted from summer practice. More top students remained top students (63%) in language skills if they worked on the packets than if they did not (31%; p<.10).

Thus some students in three groups benefitted from high use of summer packets. Poor, fair, and better students who worked more on the packets during the summer were more likely to do better than expected on the post-test skills in the fall compared...
to other students of equal abilities. The differences were significant at the .12, .05, and .10 levels for poor, fair, and top students, respectively. These are modest but potentially important differences, given the size of the sample and other limitations of the data. Other samples of students must be tested to determine whether there are consistent significant effects of summer packet use on fall skills.

Recommendations

The results suggest some directions for improving the distribution, use and quality of the packets, and overall parent involvement in the program.

Increasing Packet Distribution

The PEN Team succeeded in alerting most parents and preparing students to receive the Summer Home Learning packets. However, over a third of all the students in the sample say they did not receive one or both of the packets, or omitted that information. Several factors may account for distribution problems. Some of the students may have been new to the school and were not supposed to receive packets. There may have been a problem with the school's list of addresses or students may not have been home in the summer. Address lists need to be checked periodically, or students could write their own addresses on mailing labels for the packets before they leave school in June.

Improving Packet Activities and Increasing Use

The fact that nearly half of all students in the sample did only one or two or no activities indicates that the exercises still may not be sufficiently engaging. Or, it may be that because there are no real consequences for completing the work, the summer activities are ignored by many students. Or, it may be that the importance of doing the exercises is not fully understood or accepted by the students or their parents.

In the evaluation of the implementation of this project in its first year, students reported that they would do more activities during the summer if they were fun and if they were directed at the students' own levels of ability. Activities should be reviewed each year and redesigned, as needed, to be engaging and appropriately challenging.

The PEN Team and other teachers and administrators might pause at this point in the project to reconsider the goals for summer packets. Is the goal to help students maintain or improve basic skills that they already learned? For all subjects or only certain subjects? Is the goal to create a stronger partnership between parents and teachers by involving parents with their children on learning activities in the summer? Is the goal to increase students' and parents' appreciation for things that can be learned at home as well as at school?

Each of these goals addresses a different aspect of students' education and requires specific types of activities. Presently, the packets are designed to help students practice basic skills.

To increase other types of learning at home in the summer, activities would need to be strikingly different from regular school work. The PEN Team might consider designing activities that do not emphasize drill but fit more with the mood of the summer and that still are good preparation for work in the fall. Activities might develop students' habits in summer reading or writing, or self-learning -- such as making a scrapbook or writing commentaries on newspaper articles about particular events that occur throughout the summer.

Another question the Team might consider answering is: How will the activities be suited to students' various abilities? For example, students' assignments could be based on their skill levels reflected on pre-tests. This would require different packets for students at different levels of starting skills and different needs for practice. Or, the same packets could contain activities that can be completed at any level of ability -- for example, writing activities that allow students to improve their writing skills from their own starting place.

Increasing Parent Involvement

To increase parent involvement, the team might consider: 1) improving instructions to parents and students on how to use the packets; and 2) creating activities that increase parent-student interaction.

Just about half the students in the sample worked with a parent, and those who did completed more activities. Many parents need more information and specific instructions on how to interact with their children on the summer packet activities. Students also may need more information about how their teachers want them to involve their parents in the work. Middle grades students can aptly handle communications with parents if teachers explain the reasons for their parents' involvement and emphasize these expectations.

Parent participation might increase if the activities were more interactive. This would involve a different design. Activities could require students to show, explain, and discuss their work with a parent; obtain information or reactions from a parent in a survey or interview; ask a parent to listen to what the student has written; or discuss ideas that are
student has written; or discuss ideas that are important to the student or the family. The TIPS (Teachers Involve Parents in Schoolwork) process and activities developed by teachers in Calverton and West Baltimore Middle Schools for use during the school year illustrate several strategies for guiding students’ interactions with parents to obtain ideas, suggestions, or reactions in language arts and science/health (Epstein, Jackson, Salinas, and teachers, 1990).

To increase parent involvement, the PEN Team might consider these questions and suggestions:

0 How often during the summer should teachers send home learning activities that involve parents in the skills their children are learning? In what subjects? For example, the team may decide to send home one packet in mid-summer instead of two.

0 How should the packets be developed to give parents a greater understanding of the curriculum? Information may be given that briefly explains why the skills in the packet were selected, and how they will help the students in the fall.

0 How do the activities require and encourage student-parent interaction? For example, to complete an activity students may be required to gather parents' opinions about a topic, or reactions to something they wrote.

0 What activities or types of interactions are desired for each skill? listening? asking questions or interviewing? supervision or monitoring? audience to observe student complete a particular skill? providing information? describing memories of parents' childhood? describing memories about the children? reactions to something the student wrote? ideas to contrast with the students' ideas? discussion of interesting topics? others?

0 Is there at least one open-ended question that invites a parent's questions, comments, or reactions to the home learning activity?

0 What types of incentives, rewards, and consequences are there for students to complete the activities? Do parents and students know if there will be tests in the skills or grades on the work in the packets? Do the students need to return the completed packets (with parent comments and signatures) in the fall?

0 Other questions from the PEN Team or other teachers.

Improving Program Planning

The PEN Team and other teachers may want to establish a schedule for planning and creating Summer Home Learning Packets each year. A timeline of goals, specific activities, and responsibilities could be outlined. The role of the PEN Team would be: 1) to collect and review activities in order to select the best ones for students' different needs and levels of learning; 2) to organize effective ways to introduce the packets to students and their parents; and 3) to develop incentives and consequences to assure participation.

To achieve the first goal, the PEN Team might consider organizing teams of teachers in each subject with leaders who are responsible for coordinating the development and/or selection of activities each year to insure that the summer packets will be suited to students' different needs and abilities. To achieve the second goal, the PEN team might consider ways of involving students, parents, other teachers, and administrators in promoting awareness of the packets in school and among families. To achieve the third goal, the team and teachers might decide how the packets will be collected, evaluated, and used in the fall.

What We Still Don't Know

The measures of the number of activities students completed in the packets or worked on with their parents used in this study were gross estimates of students' investments in learning during the summer. We do not know exactly which activities in English, math, science, or health the students actually completed. Therefore the links between activities students completed and their scores on post-tests on English skills in the fall are tenuous.

Because of the limitations of this study, we cannot say for sure that summer learning packets benefit students' skills in the fall. A rigorous assessment would require other measures, such as pre-tests on the skills that go into the packets to determine whether the students know the skill or need the practice in the summer, rather than the more general measures of prior achievement used for this report (i.e., spring CAT scores and report card grades). Upon their return in the fall, students would be given post-tests on the skills, but not in the exact form that was in the packet.

To conduct a full evaluation of the effects of packet use, students should be required to return the completed packets in the fall so that teachers know exactly which activities were completed, how well students seem to know the material, and whether parents worked with them on each activity. With
more specific information, analyses could more conclusively determine whether and when packet use maintained or increased post-test scores.

We also had no objective measure of the parents' involvement, relying only on the students' reports of how much they worked with a parent. More objective measures would include concrete evidence such as parent signatures on the activities or direct surveys of parents about their involvement.

Parent surveys (such as those in the first evaluation of the implementation of the summer packets) can be used periodically to ascertain parents' reactions to new aspects of the project, obtain comments and suggestions for improvement, and discover how parents use the packets. Although a questionnaire for parents was included in the July packet, students were not required to bring the completed surveys back in the fall. The PEN Team should consider when and how to use a parent survey and how to improve incentives to motivate students to return the parent surveys or make provisions for surveys to be returned by mail.

**Conclusion**

This evaluation was a courageous attempt of the PEN Team and other teachers to find out whether Summer Home Learning Packets and parent involvement affect student achievement. For most seventh graders, scores on language skills in the fall were explained mainly by students' prior achievement in the sixth grade, being female, and having good attendance. Some students, however, particularly those who are marginal in skills or are better students, did better than expected on skills in the fall if they worked on more activities in the Summer Home Learning Packets.

In addition to helping the school understand the potential of summer home learning packets, this evaluation also documented some important patterns in students' test scores and skills. Scores on pre- and post-tests show that, in this school, the students' basic language skills are, on average, very low. Most students are below average in their reading and language CAT scores. The range of students' achievement scores is enormous, with skills equivalent to below first grade level to above the eleventh grade level in reading; similar disparities were found for language skills.

Report card grades reflect the classroom performance of students on curricula tailored to improve students' skills. These marks show a narrower range and greater success of students in the school than do the achievement test scores. They indicate that students are being motivated by their teachers to complete classwork successfully.

These results suggest two main courses of action: 1) Because of the great disparity of students' skills, summer home learning packets may be more successful in improving scholastic achievement if the activities are tailored to students' specific levels of skills and needs. 2) To address students' learning problems, major innovative efforts in course content and instructional approaches will be needed all through the school year, in all classrooms, in all subjects, and at all grade levels.

This evaluation confirms that when students work with a parent, they are more likely to complete more of the activities than when working alone. Though the data are limited, it appears that summer home learning packets are worth developing and improving to help students practice and maintain school skills during the summer.
References

*Educational Leadership, 17, (2) 24-27.*


