Abstract

The results of a study that examined the peer tutoring program at a middle school are discussed in this article. In an effort to determine ways to improve the peer tutoring program an action research (AR) mixed design study was developed. AR is practitioner-based research. Its purpose is to examine the work of practitioners for effectiveness and to suggest changes in the program if effectiveness is not demonstrated. AR is a collaborative process of inquiry that integrates the perspectives of colleagues to make appropriate changes for the betterment of program delivery (Stringer & Dwyer, 2004). The data substantiates the need for peer tutoring and provides information for making improvements to increase effectiveness as well as program participation.

An Action Research Design Study of the Effectiveness of the Peer Tutoring Program at One Suburban Middle School

The No Child Left Behind Act (NCLB) requires schools to reach higher academic standards using research-supported practices (The Access Center, n.d.). While academic requirements are increasing, funding is decreasing. Thus, schools must develop creative means to accomplish these goals. One such example could be the use of peer tutors. Peer tutoring provides a low-cost, research-supported method to improve academics (The Access Center; Coenen, 2002; Colvin, 2007; Hooper & Walker, 2002; Stenhoff & Lignugaris, 2007). Additionally, peer tutoring offers encouragement to students to do their best which may help improve grades but may also increase the self-esteem of students who may not be doing well in academics (MacIver & Plank, 1996). According to the American School Counselor Association’s role statement (2004), professional school counselors (PSCs) promote academic achievement, career development, and social/emotional development. Within these roles, the PSCs at one suburban middle school in the southeast developed a peer tutoring program which promotes their role in academics and social/emotional development. This program also keeps the PSCs involved in the total school environment as students develop better attitudes toward academics and work toward the improvement of grades (ASCA).

Currently, this middle school counseling program provides daily peer tutoring before school called CAT Attack (CA). The peer tutoring is promoted through the Beta club. The PSCs attend the Beta Club where they explain the tasks of peer tutors and recruit 7th and 8th grade volunteers for one-on-one tutoring of 6th, 7th, and 8th graders. The tutoring can be same-age tutoring or cross-age tutoring. The National Beta organization allows schools to design clubs according to the needs of students within the school (http://www.betaculb.org/benefits.php). Beta Club, as a leadership-service organization for grades 7 and 8, fits well with CAT Attack because its purpose is to promote character that makes for good citizenship. Credible achievement and commendable attitude are among the qualifications for individual membership. Also a student must attain a cumulative grade point average of 95 or higher to be considered for membership.
In addition to Beta Club recruiting, teachers are also asked to recommend students, who are either strong academically, like to help others, or are very good at organizing.

The PSCs provide a brief training at the start of the school year. The duties of peer tutoring and a description of what it takes to be a successful tutor are explained. Finally, the peer tutor volunteers are asked whether they are still interested in the program after the training session. While help with organization is structured, academic support is unstructured depending on tutee needs. Students attending tutoring sessions were given awards if their grades improved. Tutors received awards thanking them for their assistance. While the PSCs believe this program has been beneficial to students, no formal data was collected before this action research study and only a relatively small portion of students were attending. Improvements could significantly advance the program.

The purpose of this article is to share the results of an action research study (ARS) focused on improving a peer tutoring program. Action research is practitioner based research using survey data or small experiments, observations, reflective analysis, and factual information from such sources as literature reviews to assist them in their work (Stringer & Dwyer, 2005). The data collected in this ARS were expected to reveal whether the program was effective and to identify ways to increase participation. This ARS was conducted at an upper-middle-class, suburban school in Georgia with a student population of approximately 915 students. The ethnic make-up is 81% white, 11.1% African-American, 3.4% Hispanic, 1.7% Asian, and 2.7% other. The student population consists of 31.1% of the students identified as gifted, 9.7% identified as special education, and 12.8% of the students identified as gifted, 9.7% identified as special education, and 12.8% of the students identified as special education. The Access Center (n.d.) explained three common types of peer tutoring. Cross-Age Tutoring involves older students tutoring younger students. While tutors received training, the format of the sessions remained unstructured. Tutors acted as models for behavior, organization, and improving study habits. Another tutoring method was Peer-Assisted Learning Strategies (PALS). The PALS approach includes very structured tutoring in math and reading two or three times a week for about 30 minutes. Higher and lower-achieving students were paired together. The higher achiever always began the session as the model and encouraged the lower achieving student to complete the next step. One other peer tutoring program was Reciprocal Peer Tutoring (RPT). RPT consists of two or more students working in a structured format of prompting, teaching, monitoring, evaluating, and encouraging. Tutors and tutees alternated roles in RPT. The main differences in training were the amount of structure and number of participants in tutoring sessions, but all three programs indicated peer tutoring is beneficial (Access Center).

**Benefits of Peer Tutoring**

Kalkowski (1995) indicated improvements in academics, social behavior, discipline, peer relations, self-esteem, subject attitudes, and school attendance as benefits of peer tutoring. Interestingly, benefits were reported for the tutor as well as tutee. The greatest improvements were for short, structured programs designed to teach lower-level skills. Kalkowski found tutees were less intimidated by
peer tutors than adults. Therefore, tutees felt less vulnerable when questioning and exploring, which allowed more complex higher-order thinking.

Obiakor, as cited in Roswal & Mims (1995) reported students often fail and drop out because of low self-esteem. Therefore, improving self-esteem could decrease failures. When research found peer tutoring improved self-esteem, improvements in dropout rates were also demonstrated. Roswal and Mims also reported greater benefits for students both with and without disabilities using peer tutors versus traditional teacher-only education. Bond and Castagnera (2006) indicated peer tutoring is a small-scale society because students must learn to work together. Therefore, benefits went beyond individual students or schools, positively impacting society as a whole. Coenen (2002) reported that one-on-one teaching also allowed tutees to proceed at their own pace and permitted better understanding of material. Additionally, peer tutoring was reported as a low-cost method to address academic concerns (The Access Center, n. d.). At a time when education funding is being drastically cut, this may present a great benefit to school systems. The most significant benefits to academic achievement as well as self-esteem are seen in effective peer tutoring programs.

**Successful Components of Peer Tutoring**

Coenen (2002) suggested successful peer tutoring programs include several other factors besides training. Peer tutoring programs need established goals and objectives, and tutors need to understand those goals. Adult supervision is essential at all sessions to answer tutor questions, oversee behavior, provide tutor feedback, and to communicate with parents, teachers or administrators if necessary. Hartman (1996) suggests peer tutors should possess leadership skills and a sense of responsibility. Tutors are expected to be able to explain the concepts of the subject being reviewed and have the ability to pique the interest of the tutee about the subject matter.

If possible, tutors should be matched with tutees who are similar which could be according to gender, ethnicity, socioeconomic status (SES) or similarity in achievement level (Hartman, 1996). Hartman found the best match occurs when both share similar social characteristics and academic achievements. Hartman reported these similarities allow the best means of collaboration because tutors and tutees more readily view one another as equals. Coenen (2002) found matching according to similarity provides more effective and comfortable communication.

Several studies suggest the most crucial component of a successful peer tutoring program is tutor training (Bond & Castagnera, 2006; Burns, 2006; Coenen, 2002). While researchers agreed on the importance of training, they varied on the type of training necessary. Burns recommended training immediately before each tutoring session. Bond & Castagnera reported five training sessions were necessary. The first would teach about equity, fairness, and special education. The second offered simple on-the-spot teaching strategies. In the third session, training focused on communicating with those who have difficulty communicating. The fourth session encouraged reflection on the importance of friendships and facilitating friendships with tutees. The final session was to share what tutors had learned over their semester. Coenen (2002) believed three types of training were necessary: preparatory, weekly, and in-session training. Preparatory occurred the week before tutoring began covering teaching strategies, program goals and procedures, and questioning techniques. Weekly meetings provided further informal training on selected topics. In-session training offered on-the-job feedback to tutors on necessary skills.

The information gathered in the literature review was used to guide the ARS methodology. The use of literature reviews is a viable source of data for ARSs (Stringer & Dwyer, 2004).

**Methodology**

A distinctive feature of any ARS is the increased understanding of practitioners to formulate effective actions to resolve a problem or to make changes in their work. Stringer and Dwyer (2005) suggest a collaborative process of inquiry that incorporates the perceptions of colleagues tends to better serve client needs. In this ARS quantitative data was gathered through student surveys, teacher surveys, student grades, and the peer tutoring log-in book with the intent to better the process of CA. Qualitative data was gathered about the delivery process and to confirm effectiveness using observations and informal discussions with tutees and tutors. The student survey consisted of 6 items asking students to provide feedback about CA and to identify reasons why some students did not attend CA (see Appendix A). A 5 item teacher survey was developed asking teachers to rate CA and to check whether teachers informed students about CA (see Appendix B).

Because a key feature of AR is to look at the practitioner's own work, the data gathered answered the following research questions which were developed from the review of the literature: How effective is our current peer tutoring program at addressing student needs? What can be
done to increase participation in the peer tutoring program? What improvements are needed in the current peer tutoring program?

**Participants**

Twenty teacher surveys were placed in school mailboxes after an email notifying them about the anonymous survey. Teachers were asked to complete the survey honestly and return it to an envelope in the principal investigator’s (PI) school mailbox. For this AR study the PI was the PSC in charge of CA. Fifteen teacher surveys (75%) were returned. Additionally, students who returned their permission slips were given the anonymous survey in their math connections class. Students returned the surveys to an envelope in the classroom after completing it. Only 25 of the 45 (55%) permission slips were returned. Three of the returned permission slips stated parents did not want their children to participate in the ARS.

The PSCs required students to sign in each time they attended CA. The CA log book was used to find out how many students attended CA before and after interventions occurred. Furthermore, the log was used to determine students who started attending CA second semester. Those students’ second semester grades were compared with third semester grades to determine if grades improved while attending CA. For some qualitative verification, the PI talked briefly with random students about the tutoring process. The discussions and observations that were made during daily CA sessions were integrated into the PI’s field notes for later analysis. The timeframe for the entire study from the development of the research questions, permission gathering, data collection and analysis occurred during spring semester only. All the quantitative and qualitative data were gathered for further data analysis.

**Data Analysis**

**Teacher Survey**

A total of 20 6th, 7th, and 8th grade teachers were given surveys. Fifteen surveys (75%) were completed and returned. Eighty percent of the respondents indicated they had 3 to 5 students attending CA, 13% had 1 to 2, and 7% had 5 or more students attending (see Appendix C). Seventy-three percent of the respondents believed CA had been somewhat helpful for students, and 27% believed CA was very helpful. All teacher respondents (100%) indicated they had informed parents about CA in conferences, 93% indicated they tell the students about CA, and 7% told the PSCs about students who need to attend CA. While teacher respondents indicated they believe CA is helpful, they did offer a few suggestions (see Appendix D). Forty percent of the respondents wanted more feedback about which of their students were attending CA and what they worked on in CA. Twenty percent recommended the PSCs remind the students regularly about the services offered in CA. The students offered additional feedback.

**Student Survey**

A total of 45 6th, 7th, and 8th grade students were given permission slips to take the survey. Fifty-five percent of the permission slips were returned for a participant sample of 25. The permission slips returned were from a cross section of students (8 - 6th graders, 8 - 7th graders and 9 - 8th graders). Of the 25 participants, 45% indicated they had never attended CA, 32% attended 1 to 5 times, 5% attended 6 to 10 times, and 18% had attended more than 10 times (see Appendix E). Thirteen percent of the students stated CA was not helpful. In contrast, 40% indicated CA was somewhat helpful, and 27% indicated CA was very helpful. Most of the students indicated they came for help with math (67%), followed by language arts (47%), organization (20%), and science (7%). They had heard about CA from their teachers (47%), PSCs (47%), parents (20%), and friends (13%). The students who indicated they did not attend CA reported it was because they wanted to be with their friends in the morning (36%), did not know about CA (29%), did not need the help (21%), or could not arrive early to attend (14%). Most students said they would not change anything about the program, but a few had suggestions (see Appendix F). Some suggestions were to make CA longer than 20 minutes, to have after school sessions, make it more useful, and to have their teachers come in to help.

**Log-In Data**

Field notes, observations and attendance records added further data. The CA log-in book indicated that as of mid-semester 100 students had attended CA. Sixty-eight of those students had attended 5 or fewer times, 15 had attended 10 or fewer, 17 had attended more than 10 times. Thirty-one students began attending after January when the interventions began. This increase was exciting. However, 15 of the 31 only attended once. The log-in book identified students who started attending CA second se-
The Effects of the Peer Tutoring Program

mester. Student’s average for their five academic classes improved from 77.9% the second 9 weeks to a 78% for the third 9 weeks after they began attending CA.

Discussion

The results of this ARS indicated that although most students and teachers felt favorably about CA, there were still improvements to address. The majority of students attended CA only a few times. Is this because they rarely needed assistance or because the assistance they received was inadequate? Only 13% of those attending stated that CA was not helpful and this data came from students who had only attended 1 to 5 times. However, 36% indicated they did not attend because they wanted to be with their friends in the morning. This indicates students do not attend frequently because it eliminates one of the only times in their day for socializing. This is further supported by the observation that many of the regular attendees at CA were not very social with peers. These students liked the positive interaction with the PSCs. Further, discussions with those who only attended CA occasionally seemed to indicate many students attend CA only when they have a particular question. This could possibly be addressed by offering a CA session during the school day.

Also, more extensive tutor training could be offered to combat any issues with students not receiving adequate help. It was not surprising to find perceptions indicated the program was effective. However, it was amazing to discover the greatest hindrance to increasing participation was spending time with friends and not as the PSCs thought the difficulty lay in arriving at school early.

While teachers had some knowledge of their students attending CA, they were not well informed. This was evident in the discrepancy in the teacher and student surveys. Teachers were not aware of the type of help students were receiving. Teachers believed most of their students went for help with organization, but students said math assistance was their greatest need. Further evidence of this was in the teachers’ suggestion of a notification about student attendance and what students worked on at CA. This could be provided in a weekly report for teachers.

Since there was a 45% increase in students attending CA after the interventions began (please see section on interventions), it seemed the interventions were effective. Reminding the teachers and students about the services offered during CA increased CA attendance significantly. Furthermore, since 100% of the teachers indicated they told parents in conferences about CA, it seemed useful to provide teachers with a brochure about CA to give to parents.

The average scores for students who began attending CA rose from 77.9% the second 9 weeks to a 78% for the third 9 weeks. While this may seem like an insignificant gain, considering textbook material in many subjects typically gets harder second semester this is still an increase. The survey indicated the majority of the students come to CA for academic assistance in math (67%) and language arts (47%). Therefore, it is essential to provide peer tutors who are strong in those subject areas. Interventions were implemented to address these findings.

Interventions

Current Interventions

After analysis of student and teacher surveys, it was determined students needed more information about the peer tutoring program. Therefore, a short slide power point presentation (PPT) was developed to describe all the services offered in CA. The PSCs used the PPT during classroom guidance lessons presented to all 6th, 7th and 8th grade students in their social studies class. PSCs described each of the services offered at CA such as: organization, academic assistance, computer/internet usage, and school supplies provided. PSCs informed students of the time and location for CA and then answered any questions the class had. At the end of the guidance lesson, PSCs handed out passes to students who wished to attend peer tutoring.

After the teacher survey and discussion with teachers, it was decided a brochure was the most effective way to inform and remind teachers about CA. Additionally, the brochures could be used to inform parents about CA. The PSCs with the help of several teachers developed a brochure with the essential information about CA that would be useful to parents as well as teachers. All the teachers were presented information about the brochure. The brochure’s usage, which was to remind teachers about CA and to provide them with a handout for parents, was explained. Then, the brochure was placed in each teacher’s school mailbox.

As a result of increased attention to CA, the number of students attending CA increased. The PSCs petitioned teachers for the names of more students who would be good tutor candidates. New students were gathered and given training so as to provide more tutors this year as well as continued help for next year. For current tutors, Coenen (2002) believes in-session training offering frequent on-the-job feedback to tutors on necessary skills is important to program success. Consequently, observa-
tions by the PSCs helped provide feedback on tutors’ daily interactions with tutees. Additionally, the PSCs listened to tutors’ input on improvements for CA. The tutors suggested incorporating red and green cups in CA. Displaying a green cup indicates the tutee does not need help, and a red cup signifies a tutee needs help. Tutors believed they were interrupting students at times and wanted a way to help without disrupting students deep in thought. The tutors described the new procedures to students as they signed in at CA and gave each student a red and green cup. The new procedure gave the tutors more buy-in and commitment to CA as well as improvement to the peer tutoring program.

**Future Interventions**

Research suggests the most crucial component of a successful peer tutoring program is tutor training (Bond & Castagnera, 2006; Burns, 2006; Coenen, 2002). While the PSCs provide training at the beginning of the year, it is brief and not as comprehensive as that recommended in the literature. Therefore, the PSCs plan to offer more complete and on-going training in the future. The PSCs will offer half-day training at the beginning of each school year. Foster (2004) provides units on orientation, helping relationships, communication, behavior management, principles of education, and content area tutoring. This is a very thorough training handbook for developing a successful peer tutoring program. Selected assignments that best meet the goals of CA will be implemented. In addition, the PSCs plan to complete short follow-up discussions and training on a monthly basis, as well as provide daily feedback. Even with great new insights there were limitations.

**Limitations**

One of the challenges with this ARS was getting students to return the permission slip to take the survey. Candy was offered to all the students who returned permission slips as an incentive. However, only 25 of the 45 permission slips were returned and three of the parents indicated their children could not participate. The return rate might have been higher if parents had been called and told permission slips were being sent home and if parents were given explanations about the survey. Explanations could have indicated the possibility of grade improvements which may have encouraged parents to learn more about CA. Even if all the permission slips were returned, this is a very limited population. The results only examine a few students in one suburban middle school and could not be generalized for all populations. Additionally, the survey did not address demographics of the population utilizing CA and this could be helpful information to gather in the future.

Further limitations were with the survey. Students seem to misunderstand some of the items. The directions stated to skip to question #5 if they had never attended CA. However, some of the students did not skip to question #5 and some did. Also, teachers and students were allowed to check more than one answer on some questions. Therefore, the totals on some questions were greater than 100% which is somewhat confusing. Even with these limitations some conclusions could be reached.

Finally, researcher bias and subjectivity which are considered by most qualitative researchers to be both important and inevitable must be addressed. Mehra (2002) teaches the need for practitioners to honestly and openly acknowledge their biases as well as what self-influences they have about the research. Generally practitioners have a good idea about the program or plan they want to study. This drives the work and leads practitioners to question their work. It further impels them to find out what they do not know about their work so that they might make it better. As a PSC, who is in charge of the peer tutoring program it was important that I acknowledge my bias so that I would concentrate on learning how to improve the program for the benefit of the students involved.

**Conclusions**

This study revealed that the teachers and students surveyed believed the peer tutoring program as implemented is effective. However, based on the information gathered improvements can be made to increase the effectiveness and participation in the program. More training for our tutors will boost their usefulness, thus improving the program. In addition, results indicated students and teachers need regular reminders about CA throughout the school year. This has the potential to encourage attendance. Therefore, the PSCs will teach guidance lessons annually describing all the services offered at CA and provide monthly reminders on the morning announcements about CA. Overall, the results of the study indicated positive attitudes about CA, and the PSCs intend to cultivate and build on those attitudes.
The Effects of the Peer Tutoring Program

References


Journal of Special Education, 40(3), 130-137.


Appendix A
CAT Attack Student Survey

1. How often have you attended CAT Attack?
   ___ Never (If never skip to question #5.)
   ___ 1-5 times
   ___ 6-10 times
   ___ more than 10 times

2. How helpful did you find CAT Attack?
   ___ Never attended
   ___ Not helpful
   ___ Somewhat helpful
   ___ Very helpful

3. What did you receive help with at CAT Attack?
   ___ Organization
   ___ Math
   ___ Language Arts
   ___ Science
   ___ Reading
   ___ Social Studies

4. How did you hear about CAT Attack?
   ___ Friend
   ___ Teacher
   ___ Counselor
   ___ Parent
   ___ Other ______________________

5. Reason you do not attend CAT Attack.
   ___ Do not know about it.
   ___ Do not get to school in time to attend
   ___ Do not need the help
   ___ Want to be with my friends in the morning
   ___ Other – explain ________________________________________________

6. What could we do to make CAT Attack more useful to you?
Appendix B
CAT Attack Teacher Survey

1. How many students do you have attending CAT Attack?
   __ None (If none skip to question #5.)
   __ 1-2 students
   __ 3-5 students
   __ more than 5 students

2. How beneficial do you believe CAT Attack has been for your students?
   __ Not helpful
   __ Somewhat helpful
   __ Very helpful

3. What do your students receive help with at CAT Attack?
   __ Organization
   __ Math
   __ Language Arts
   __ Science
   __ Reading
   __ Social Studies

4. When do you tell your students about CAT Attack?
   __ Do not tell them
   __ Tell parents during conferences
   __ Tell the student’s counselor
   __ Tell the student personally
   Other ______________________

5. What could the PSCs do to make CAT Attack be more useful?

Include your name if you would like me to see you for further details._________________________
The Effects of the Peer Tutoring Program

Appendix C

Table 1
CAT Attack Teacher Survey

<table>
<thead>
<tr>
<th>Questions</th>
<th>Responses</th>
<th>Responses</th>
<th>Responses</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>1-2 Students</td>
<td>3-5 Students</td>
<td>5+ Students</td>
</tr>
<tr>
<td>1. Attendance</td>
<td>0%</td>
<td>13%</td>
<td>80%</td>
<td>7%</td>
</tr>
<tr>
<td>2. CAT is helpful</td>
<td>Not helpful</td>
<td>Somewhat helpful</td>
<td>Very helpful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>73%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>3. Help with</td>
<td>Organization</td>
<td>Math</td>
<td>Language Arts</td>
<td>Other*</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>33%</td>
<td>13%</td>
<td>20%</td>
</tr>
<tr>
<td>4. Tell about CAT</td>
<td>Don’t tell</td>
<td>Conferences</td>
<td>Counselor</td>
<td>Student</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>100%</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>

*Science, reading, and social studies

Appendix D

Table 2
What could the PSCs do to make CAT Attack be more beneficial?

<table>
<thead>
<tr>
<th>Teacher Responses</th>
<th>Number of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like the way program is being run</td>
<td>1</td>
</tr>
<tr>
<td>Very helpful</td>
<td>1</td>
</tr>
<tr>
<td>Nothing it’s great</td>
<td>1</td>
</tr>
<tr>
<td>Talk to students and show them how it works</td>
<td>1</td>
</tr>
<tr>
<td>Make periodic announcements about CAT</td>
<td>2</td>
</tr>
<tr>
<td>Let teachers know which students attend and what they get help with</td>
<td>6</td>
</tr>
</tbody>
</table>
### Appendix E

**Table 3**  
*CAT Attack Student Survey*

<table>
<thead>
<tr>
<th>Questions</th>
<th>Responses</th>
<th>45%</th>
<th>32%</th>
<th>5%</th>
<th>18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attendance</td>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-5 Times</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-10 Times</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10+ Times</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CAT is helpful</td>
<td>Never attended</td>
<td>45%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not helpful</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somewhat helpful</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very helpful</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Help with</td>
<td>Organization</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>67%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language Arts</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other*</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Hear about CAT</td>
<td>Friend</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Counselor</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Reason not attending</td>
<td>Didn’t know</td>
<td>29%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Don’t need</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>36%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Science, reading, and social studies

### Appendix F

**Table 4**  
*What could we do to make CAT Attack more useful to you?*

<table>
<thead>
<tr>
<th>Student Responses</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>7</td>
</tr>
<tr>
<td>Haven’t been don’t know</td>
<td>5</td>
</tr>
<tr>
<td>Make it more useful</td>
<td>2</td>
</tr>
<tr>
<td>Make the time earlier so we have more minutes</td>
<td>1</td>
</tr>
<tr>
<td>Get teachers to come in and help</td>
<td>1</td>
</tr>
<tr>
<td>Have after school sessions</td>
<td>1</td>
</tr>
</tbody>
</table>