Homework Hotline:

Toward Realizing the Full Potential

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VANDERBILT UNIVERSITY CAPSTONE

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Executive Summary

Homework Hotline provides telephone-based academic tutoring in six languages (English, Spanish, Arabic, Kurdish, Swahili, and Turkmani) to students in Nashville, Tennessee, as well as the rest of the state, from 4pm to 8pm, Monday through Thursday when Metro Nashville Public Schools (MNPS) is in session.

Community leaders created Homework Hotline in 1990 to address Nashville's having one of the nation's lowest graduation rates by raising academic achievement and increasing high school graduation rates. The literature supports this positive link between homework completion and academic achievement (Cooper et. al, 2006).

Since its inception, Homework Hotline has worked in partnership with MNPS. Metro provides the physical location where Homework Hotline is housed and many of the tutors' salaries. MNPS currently contributes approximately 25 percent of Homework Hotline's operating budget, with the majority of Homework Hotline's funding coming from corporations and corporate sponsorships (Homework Hotline 2009-2010 annual report).

Metro Nashville Public Schools, which always has looked for ways to help its struggling students, was a key founding partner for Homework Hotline. MNPS continues to explore ways to improve supplemental services for their students. In their latest initiative, MNPS Achieves, the superintendent describes one main goal as helping middle school students in mathematics. Similarly, Homework Hotline's biggest clients are middle school students in math. While not presently integrated in any fashion, Homework Hotline and MNPS strive to work on the same goal.

In this context, Homework Hotline requested that the capstone team design a study that would show how Homework Hotline helps raise academic achievement. However, the literature suggests phone assistance tutoring alone does not raise student achievement effectively (Barrett and Neal, 1992); rather, the key factors in raising student achievement are teacher quality (Darling-Hammond, 1999) and student attendance (Gottfried, 2010). Consequently, the capstone team and client agreed upon an attainable research question:

"How does Homework Hotline support the academic needs of middle school students at MNPS?"

In an effort to address fully this question, the capstone team designed a mixed method project using both quantitative and qualitative data. This report focuses on the following probes:

1. How do utilization rates and types of assistance requested differ across MNPS schools? What specific content areas are most requested?

2. How do stakeholders perceive Homework Hotline?

3. How is information regarding Homework Hotline disseminated across the district and within schools?

This capstone study was conducted using quantitative data from all MNPS middle schools, as well as more detailed qualitative data from four middle schools in MNPS. The team and Homework Hotline decided to focus on middle schools since the highest number of calls come from middle school students (Homework Hotline website). The capstone team conducted interviews with the principal, counselor, and teachers at each of the MNPS middle schools in the study. Interviews of tutors, students, and Homework Hotline administrators were conducted at the Homework Hotline office. While at each location, the team made observations, took notes, and collected artifacts.

After reviewing the qualitative and quantitative data, the findings, and accompanying recommendations, clustered around five key areas: Mission, Marketing, Resources/Capacity, Instructional Quality, and Student Outcomes. A summary of highlights of the findings and recommendations follows:

Findings:

1) ***Mission*** - Homework Hotline's stated mission, the mission as perceived by Homework Hotline staff, and the students who are actually served are not in sync. The stated mission seeks to provide services, in multiple languages, to all students in Tennessee, in all subject areas, to learn concepts, complete assignments, and to gain skills. The personnel of Homework Hotline believe their "real mission" is to serve MNPS' lower socioeconomic students who have no resources available to them. In reality, the typical caller, who calls only once, is an English speaking MNPS middle school student who requires assistance with math.
2) ***Marketing*** – Across all schools visited, there exists a general lack of understanding about Homework Hotline. While the sticker is known and distributed, the rest of their marketing efforts do not have the intended results

of promoting their services or educating the schools on their purpose.

3) ***Resources/Capacity*** – Homework Hotline meets the needs of students who call at its current capacity level. The office is provided by MNPS and generally meets their needs. MNPS also provides textbooks and workbooks to help the tutoring of their students. However, the office is otherwise poor in resources. The tutors only have a phone, paper, and pencils to work with during tutoring sessions. They have access to a computer but must put the student on hold and physically walk to it. Data entry is not efficient as it is collected on all callers by hand and then turned in for input later.

4) ***Instructional Quality*** – Limitations exist when tutoring by phone such as appealing to only the auditory learning style, understanding what the student is working on when it is not visible, and determining appropriate tutoring methods based on the methods used by the actual teacher versus the tutor's preferences. Also, not all tutors are equal. Some students call back until they find a tutor that can successfully help them. Finally, no formal assessment or professional development takes place for the tutors and their efficacy.

5) ***Student Outcomes*** – The students interviewed reported a positive experience with Homework Hotline. Likewise, the Homework Hotline staff also expressed the same message. From both sets of accounts, Homework Hotline gives the students the help they request and both stakeholders believe they have benefited from the services provided.

Recommendations:

1) ***Mission*** – Given the disconnect between the perceived mission, the actual mission statement, and the reality of students that call, Homework Hotline should revisit their purpose. They should narrow their mission to include only MNPS students, or 71 thousand students. Given that even this population is enormous, they should narrow down further to just MNPS middle schools in mathematics. Once their mission is redefined, they can collaborate and coordinate closely with MNPS personnel to ensure the best support in mathematics for the students.

2) ***Marketing*** – Homework Hotline should develop a business and marketing plan that will enable the organization to brand it services in the Nashville community. The executive director should select partner middle schools to target intentionally and develop close

relationships with personnel in those schools.

3) ***Resources/Capacity*** – Homework Hotline should invest in technology to improve its services. They should keep electronic data on the students they tutor and look up contextual data on students by accessing the MNPS data warehouse, teacher websites, and school electronic resources. They should also invest in training their tutors beyond an orientation session. By partnering with MNPS, the tutors could participate in the math professional development and EL training they will offer as a part of MNPS Achieves.

4) ***Instructional Quality*** – The executive director should become the instructional leader of the organization. She should lead the tutors in growing in their understanding of best tutoring practices that support MNPS teachers. Homework Hotline employees should also learn about ways to tutor students that incorporates instructional technology. They should gather the new mathematics pacing guides and other materials used across the district and seek to coordinate with partner middle schools. Finally, by keeping electronic files on frequent callers, the tutors may offer a more personalized service by referring to these records at the time the student calls.

5) ***Student Outcomes*** – There are no measures in place to truly determine student outcomes as a result of the tutoring. Homework Hotline should consider removing student anonymity and really learn about the students that call back. They should collaborate with teachers to determine what effects the tutoring may have had in the classroom. Homework Hotline should find ways to actually measure their effectiveness with data that are triangulated. A longitudinal study could be created that looks at middle school students in partner schools versus non-partner schools and see if there is a difference in the mean math scores.

BACKGROUND ON HOMEWORK HOTLINE

Homework Hotline is a non-profit organization that provides one-on-one free tutoring by telephone to public school students in the Metro Nashville Public School (MNPS) system and 30 surrounding districts. Homework Hotline started in 1990 and has slowly grown over the past twenty years to servicing over 24,000 calls per school year with a total of over 400,000 calls serviced during its existence (HH 2009-2010 annual report). (See Appendix 16.)

The mission of Homework Hotline is to provide "one-on-one free tutoring by phone to Tennessee students and parents. With Homework Hotline, students tackle new concepts, complete challenging assignments, and gain academic skills." (HH 2009-2010 annual report) Homework Hotline accomplishes these goals through maintaining 34 tutors on staff with a nightly group of 16-22 tutors taking calls (Personal communication, Kurland, 2011).

Although Homework Hotline has been in existence for 20 years, it was not one of the first homework assistance phone lines in the country. The first homework assistance program started in Jacksonville, Florida in 1984, followed by a program in Denver, Colorado in 1985 (Solomon, 1991). Those hotlines are no longer in existence, but homework hotline programs have grown in popularity resulting in 17 homework assistance programs in 11 states. (Homework Hotline Website).

In 1990, Memphis boasted a Homework Hotline. Nashville leaders felt that MNPS students also deserved access to assistance with homework, so leaders from the business community, teachers' union, the media, and MNPS worked together to start Homework Hotline.

The original plan called for the Hotline to use a television format and students would call in to the live television show. Nashville's Community Access Television (CAT) had agreed to house and sponsor the show. However, CAT lost its municipal funding and production was suspended in September 1990. MNPS volunteered to house the program in the Cohn Adult Learning Center and the format was changed to a telephone assistance hotline.

Homework Hotline has been housed in the Cohn Adult Learning Center during its entire 20 year tenure. Homework Hotline was originally housed in a single classroom on the third floor, but eight years ago, the office was moved and expanded to a double sized classroom in the basement (Kurland interview, 2011).

Funding for Homework Hotline comes from a variety of sources. MNPS support comes in the form of providing a physical location for Homework Hotline as well as providing stipends to current MNPS teachers to provide tutoring at Homework Hotline. (Internal memo, Kurland, 2010). The total funding that MNPS contributes is $83,000 of the $364,334 in total funding.

Funding Sources	
Individual Sponsors	$90,000
Corporations and Foundations	$27,000
MNPS	$83,000
Individuals	$31,534
Other	$800
In-Kind	$132,000
Total	$364,334

2009-2010 Homework Hotline Annual Report

MNPS also provides copies of all currently adopted textbooks for the tutors to use. In addition to the school system, other sources of funding for Homework Hotline include: corporations, foundations, individuals, and in-kind donations (HH 2008-2009 annual report). For their support, all sponsors are listed on the Homework Hotline stickers that are handed out each year to all students in Middle Tennessee.

Although Homework Hotline started out as a program for MNPS students, in 2000 Homework Hotline partnered with Dell Foundation and expanded to all 30 school districts in Middle Tennessee with Dell facilities or large numbers of Dell employees. Sonic Drive-In became a sponsor in 2004 and now provides some funding for every Middle Tennessee county that has a Sonic restaurant. (Internal memo, Kurland, 2010).

As Homework Hotline's corporate sponsorships grew, services expanded. Homework Hotline has always provided tutoring in all subjects, in all grades, K-12. Beginning in 2000, the program began offering bilingual tutoring in Spanish and Arabic to reflect the diversity of the community. That year, Homework Hotline answered 17,153 calls in four languages from seven counties (Internal memo, Kurland, 2010) By 2004, Homework Hotline had expanded to six languages. That same year, Homework Hotline began to target its services to low income and at- risk children.

As Homework Hotline expanded its services to include tutoring in six languages, the number of calls received each year increased. During the first year that Homework Hotline was in existence, it answered 5,583 calls. By 2006, the number of yearly calls had increased to 34,500. Each call averaged fewer than eight minutes per call (Internal memo, Kurland, 2010).

In 2008-2009, Homework Hotline transformed its tutoring format to include a more comprehensive approach aimed at helping the student understand concepts rather than just assisting students with particular problems. In response to this change, the length of the average phone call jumped from eight minutes to 18 minutes per call. Consequently, the total number of callers assisted declined to 24,649 calls (HH 2008-2009 annual report).

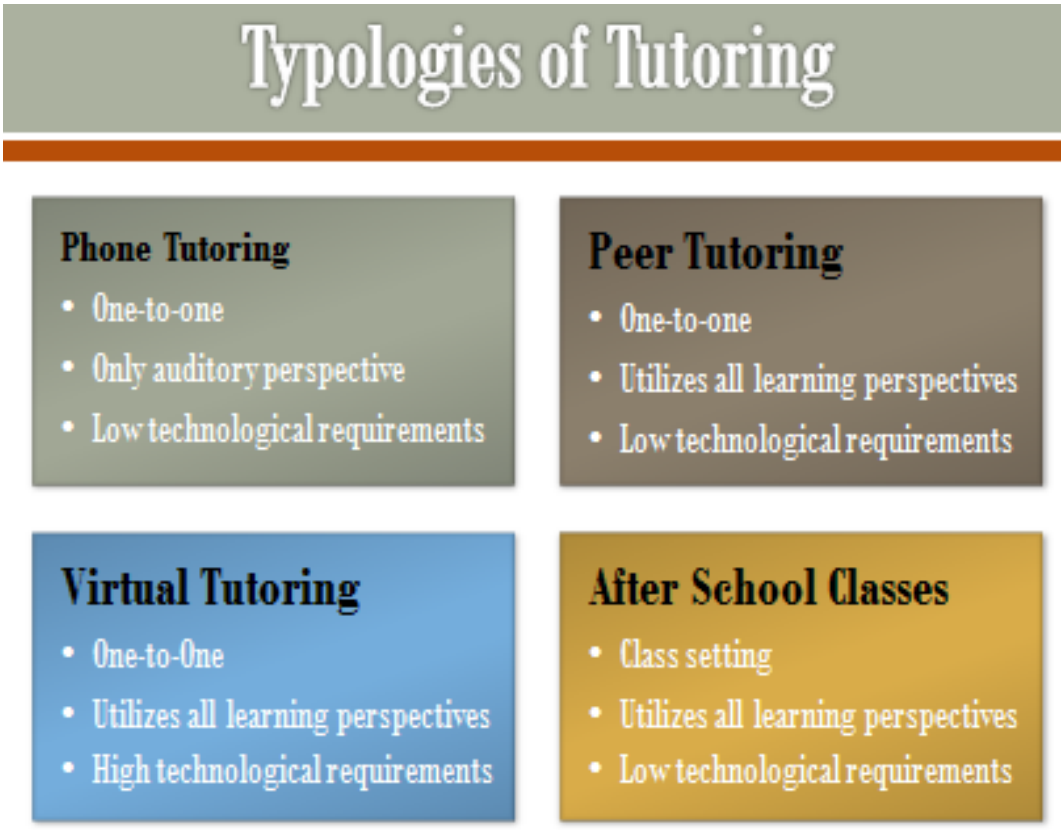
In 2009-2010, Homework Hotline began tracking student achievement by assigning students' codenames and conducting pre- and post-testing. The pre- and post-tests were informal assessments designed and administered by each tutor to determine the student's level of understanding at the beginning of the call and at the end of the call. The 2009-2010 data report that "93% of Hotline callers rated their problem as 'resolved' at the end of a call." (Internal memo, Kurland, 2010) In addition, another 83% of callers demonstrated mastery of concepts by completing their assignment and

successfully working a similar problem independently.

Homework Hotline has evolved and expanded its services during the last 20 years. During the 2009-10 school year, Hotline took over 24,000 calls, helped 6,538 different students, and provided tutoring in six languages (HH 2009-2010 annual report). Hotline is open from 4:00-8:00 PM, Monday through Thursday every day that school is in session. There are 34 total tutors; 24 of them are MNPS teachers with the remaining 10 being teachers from other school districts and graduate students. The hotline is staffed each night with 16-22 tutors; 70% of the tutors on each shift are MNPS teachers.

The Research Behind Homework Assistance Programs

The impetus for a homework assistance programs was predicated on the fact that Tennessee's education system needed to be improved in 1990. That year only 61.7 percent of Tennesseans had graduated from high school. Nationally, the state average graduation rate was 75.2 percent. Only five states had lower high school graduation rates than Tennessee: Alabama, Arkansas, Kentucky, Mississippi, and West Virginia. (US Census Bureau data; see Appendix 1.)



There is a correlation between homework completion and achievement outcomes. In a meta-analysis, Cooper et al (2006) evaluated 50 studies that correlated the amount of time students spent on homework with achievement on statewide surveys or national assessments. In all, 43 of the studies indicated that students who did more homework had better achievement outcomes.

Although the importance of homework completion becomes more evident as students move on to higher grade levels (Zimmerson & Kitsantas, 2005), Cooper et al. (2006) findings demonstrate that homework completion is also vital to student achievement in the elementary and middle school grades. Zimmerson and Kitsantas (2005) further claim that homework completion improves student self-efficacy, thus leading to improved academic outcomes.

Huang and Cho (2009) report that "many students, especially students from ethnically and linguistically diverse or low-income backgrounds, find that completing homework can be a difficult task. Students who need additional help but do not have adults at home to assist them with their homework (due to other parental demands, such as work schedules, a lack of English proficiency, or insufficient knowledge of the curriculum) may be unable to complete their homework successfully (Lareau, 2003)." One of the primary goals of Homework Hotline is to assist these students with completing their homework. In an effort to meet this goal, as noted earlier, Homework Hotline offers tutoring assistance in six languages.

While completing homework assignments has been linked to higher achievement, there are several types of tutoring programs currently in existence for helping students with their homework. Homework Hotline is an example of telephone tutoring, but there is also virtual (on-line computer) tutoring, peer tutoring, and after school classes that frequently provide both tutoring assistance with homework as well as skill-building classes and mentoring.

Research literature on the efficacy of phone tutoring is limited, according to Reach and Cooper (2004). One concern is that with the experimental design the students in the control group might gain access to the hotline which would confound the results. In spite of this potential design flaw, Barrett and Neal conducted a study on the efficacy of phone tutoring on fifth grade achievement (1992). For the study, there was an experimental group with 46 randomly assigned students who were encouraged to call a phone tutoring program. The control group of 44 students was not told about the phone tutoring program. At the end of the yearlong study, the students in the study did not do better than the control group on measures of school grades, self-esteem, or standardized test scores. However, of the 46

students in the treatment group, only 12 students called the phone tutoring program. Barrett and Neal did not report the student scores on the measures separately for those 12 students, so the results should be viewed with caution.

The research on peer tutoring is much more favorable. Okilwa and Shelby (2010) analyzed twelve peer tutoring studies on students with disabilities in grades 6 through 12. They found that peer tutoring had a positive academic effect on students regardless of their disability type. Peer tutoring was effective in both general education and special education settings in the four core content areas (language arts, math, science, and social studies).

The research on tutoring through after school programming is mixed. Several studies have been conducted that have shown the primary benefit of after school tutoring programs is to help students maintain their levels of functioning rather than increasing the levels.

In 2000, Morrison et al. conducted a study with 350 at-risk fifth and sixth grade students in California. One half of the students chosen participated in an after-school program that provided homework assistance, tutoring, and cultural enrichment activities. The other half was used as the control group. Students in both groups showed negative growth from October to May in such self-assessed areas as self-concept, self-control, and cooperation. However, the students who participated in the treatment program showed either an increase in or maintenance of key resilience variables such as bonding to school, perception of parents, and teacher-rated behavior. The control group showed negative growth in these areas.

Another study suggests tutoring assistance mitigates the deterioration of skills (Tucker et al, 1995). The study was an evaluation of an after-school tutoring program serving 148 low-income African American students in Florida. After two years, participants did not show significant increases in grades, but students who were not in the program showed a significant decrease in grades (Tucker et al, 1995).

The Gevirtz Homework Project study was slightly different than the previous studies in that it included students who were not at risk for school failure (Cosden et al, 2004). The study included 146 elementary students (72 control group and 74 in treatment group) in Santa Barbara, California, who were followed as they participated in an after school tutoring program for 50 minutes three or four days each week from fourth grade until the sixth grade.

Students' academic skills, school bonding, and social behavior were assessed from the perspective of the students, their parents and their teachers. At the end of the three years, there were no significant differences on any of the outcome measures between the treatment and control groups. However, when number of tutoring sessions attended was factored in,

students who attended a higher number of sessions for the three years recorded higher reading, math, and language scaled scores on the Stanford Achievement Test-9 (Cosden et al, 2001).

In 2009, researchers identified seven high functioning afterschool programs that had achievement gains higher than predicted (Huang and Cho). The common components in those programs included: homework support, study skills instruction, motivational strategies, and communication with students' regular teachers. In addition to the achievement gains, parents and school personnel perceived positive changes in students' academic achievement, school attendance, and attitudes and social skills.

PROJECT QUESTIONS

Homework Hotline has collected extensive data on the services it provides. These data include the caller's grade level, content area requested, school the caller attends, language spoken in the home, length of call, pre- and post-test levels of understanding, whether or not the student mastered the subject at the end of the call, and general reason why the caller called (i.e. test prep/homework check, specific homework problem, unclear on entire concept, behind grade level in subject).

Homework Hotline requested assistance from Peabody College to analyze the data and to collect additional data in order to identify strengths and weaknesses of their program. Initially, Homework Hotline was hopeful that the capstone team could design a study that would show the impact of Homework Hotline on student achievement. However, there were several reasons why that research design did not seem viable.

First, the majority of calls to Homework Hotline are one time calls; even regular callers may only call four or more times a year. Student achievement is very closely linked to teacher quality (Darling-Hammond, 1999), and attendance (Gottfried, 2010), so it is unlikely that a causal relationship between calling Homework Hotline and academic achievement could be established.

Second, the callers are given a code name when they call and their true name is never learned. This makes it almost impossible to track student achievement due to the anonymity of the caller.

Finally, although research supports the fact that homework completion is positively linked to academic achievement (Cooper et al, 2006), there are mixed results regarding the efficacy of regular tutoring programs on academic achievement (Morrison et al, 2000).

For these reasons, the capstone team and client decided that it would be more appropriate to design the study around the following question:

How does Homework Hotline support the instructional expectations of middle school students in Metro Nashville Public Schools?

To answer the question, we looked at the following elements that offered a more detailed study of the program:

1. *How do utilization rates and types of assistance requested differ across MNPS schools? What specific issues and content areas are most requested?*
2. *How do stakeholders perceive Homework Hotline?*
3. *How is information regarding Homework Hotline disseminated across the district and within schools?*

RESEARCH DESIGN

Although Homework Hotline accepts calls from all Middle Tennessee students, Metro Nashville Public School students comprise approximately 67% of all calls to Homework Hotline. In addition, middle school students account for nearly 60% of all calls. Considering these statistics, we focused our study on middle school students in MNPS.

MNPS is an urban school district enrolling over 71,000 students. The district is high poverty with over 86% of its schools being Title I schools. Approximately 72% of students are economically disadvantaged. The demographic distribution can best be described by the chart below:

MNPS District Demographics	
Enrollment	71,708
Male	38,182 or 50.8%
Female	36,918 or 49.2%
Student/Teacher Ratio	14.2
Title 1 Schools	86.5%
Attendance	95.5%
Economically	72.1%
NCLB Status	*Restructuring/Improving*
American Indian	105 or 0.1%
Asian	2,853 or 3.8%
Black	35,706 or 47.5%
Hispanic	11,882 or 15.8%
White	25,554 or 32.7%
English Learners	7,700 or 9.8%

Data retrieved from http://edu.reportcard.state.tn.us on 1/5/11 and from www.mnps.org/AssetFactory.aspx?did=39158

There are a total of 64 middle schools in MNPS. We collected quantitative data from all the MNPS middle schools. We also gathered qualitative information for our study on four specific middle schools. Those middle schools were chosen for us by the MNPS director of research and assessment. The director was given a list of all MNPS middle schools organized by call frequency to Homework Hotline; the distribution ranged from 1 call to 234 calls. He chose the following four schools for the study (pseudonyms are used): Nashville Middle School (high usage, 198 calls); Williamson Middle (medium usage, 105 calls); Davidson Middle School (low usage, 29 calls); and Tennessee Middle School (low usage, 9 calls). The demographics for these schools can be found below.

Although the Director of Research did not share the explicit reasons why these particular middle schools were chosen, we believe they were chosen as representatives of four levels of academic achievement as defined by NCLB. This diversity helps this study examine whether or not Homework Hotline made a difference in MNPS schools based upon academic achievement or socioeconomic status. Nashville Middle had the highest level of achievement, followed by Davidson Middle, then Williamson Middle and finally Tennessee Middle. All of the schools except Nashville Middle are Title I schools, and considered to be economically disadvantaged. Nashville Middle and Davidson Middle are both in good standing with their NCLB status while Tennessee Middle and Williamson Middle are both target schools. All of the schools except Davidson Middle have a

	Nashville Middle School	*Davidson Middle School*	*Tennessee Middle School*	*Williamson Middle School*
Total Calls	196	28	9	104
Enrollment	586	585	358	914
Male	305 or 51.5%	312 or 51.1%	204 or 53.3%	486 or 51.4%
Female	287 or 48.5%	298 or 48.9%	179 or 46.7%	459 or 48.6%
Student/Teacher Ratio	18.1	17.9	13.6	13.6
Title 1 School	No	Yes	Yes	Yes
Attendance	97.3%	95.3%	94.8%	96.3%
Economically Disadvantaged	251 or 45.2%	65.1%	87%	71.9%
NCLB Status	Good Standing	Good Standing	Target School	Target School
American Indian	2 or 0.3%	5 or 0.8%	0 or 0%	3 or 0.3%
Asian	45 or 7.6%	4 or 0.7%	2 or 0.5%	36 or 3.8%
Black	379 or 64%	135 or 22.1%	233 or 60.8%	516 or 54.6%
Hispanic	16 or 2.7%	40 or 6.6%	8 or 2.1%	209 or 22.1%
White	150 or 25.3%	426 or 69.8%	140 or 36.6%	181 or 19.3%
English Learners	2 or 0.4%	7 or 1.2%	0 or 0%	78 or 8.5%

Data retrieved from January 2011 http://edu.reportcard.state.tn.us and provided by MNPS schools **on 2/1/11**

high minority population. The demographic data for these four schools is described in the chart on the previous page.

For this study, the capstone team designed a mixed-method study including both quantitative and qualitative components. The team used quantitative data collected by Homework Hotline between August 2010 and November 2010 to gain a more thorough understanding of the callers and of the school usage rates, student usage rates by grade level, and the most requested content areas.

For the second component of our evaluation, the capstone team designed and conducted a qualitative study. According to Patton, "Qualitative findings grow out of three kinds of data collection: (1) in-depth open-ended interviews; (2) direct observation; and (3) written document" (Patton, 2002, p. 4). For the qualitative portion of our study, we developed semi-structured interview protocols for each of the samples we interviewed: tutors, students, principals, counselors, teachers, and Homework Hotline administrators. (See Appendices 10-15)

The interviews were conducted at the Homework Hotline office and at the four MNPS middle schools described.

After conducting our interviews at the various locations, the capstone team spent time observing and collecting artifacts. We also took pictures at Homework Hotline. (See Appendix 23.) By combining these interviews with the available quantitative data we were able to develop a comprehensive understanding of the strengths and weaknesses of Homework Hotline.

While at Hotline, the team interviewed 17 tutors, 17 students, and 2 Hotline administrators. The tutor and student interviews each lasted about 40 minutes while the administrator interviews each lasted over an hour. The administrators were also interviewed at other times during the months of August to January. The total number of individual interviews for this study is listed in the chart below:

Middle School Code Name	Number of calls to Homework Hotline Betweem 8/10-11/10	Principal Interviews	Counselor Interviews	Teacher Interviews
Davidson Middle School	28	1	1	2
Nashville Middle School - Magnet	196	1	1	2
Tennessee Middle School	9	1	1	2
Williamson Middle School	104	1	1	4

The tutors were interviewed between calls while sitting at their work stations. The workstations were approximately five feet apart. Each interview was recorded via a digital recorder as the capstone team member took notes on each tutor's response.

The students were interviewed by phone after they had finished receiving help from the tutor. The tutor asked the student if they were willing to talk to a researcher and answer questions about their experience with Homework Hotline. Those students who were willing to be interviewed were then transferred to a capstone team member. The interviewer took the call and asked to speak to the parent to secure permission for the student to be interviewed. There were five instances in which the parent was not available to give permission, so the capstone member thanked the student for his/her willingness to participate, but said the interview could not be conducted without parental approval. The student interviews were not recorded due to the limitations of interviewing via phone.

The interviews with the principals, counselors, and teachers all took place at their respective schools. The interviews with the principals and counselors took place in their respective offices at each school, while the location of the teacher interviews varied slightly from school to school. Nine of the ten teacher interviews were conducted in private, quiet settings. One teacher interview from a low use school was conducted in a teacher's classroom during her planning time when there were no other people in the room.

Qualitative Data Collection

The interview protocols were developed based on the concept map designed by the capstone team. (See Appendices 10-15.) The concept map is comprised of four components: demographics, variance of use, information dissemination, and perception of quality. (See Appendix 2.)

Individual	Interviews
MNPS Principals	4
MNPS Counselors	4
MNPS Teachers	10
Students	17
Homework Hotline Tutors	17
Homework Hotline Administrators/ Support	3
Total Interviews	55

The team sought participation by all stakeholders which included tutors, students, principals, teachers, counselors, and Homework

Hotline administrators. To determine the variance of use, the capstone team designed open-ended questions that helped determine utilization rates, types of assistance, unique issues encountered with phone tutoring, which content areas were more likely to be used, and the intersection between Homework Hotline and classroom instruction.

Understanding how information about Homework Hotline is disseminated required the capstone team to observe ways that Hotline is promoted within the schools as well as to interview principals, teachers, counselors, tutors, and Hotline administrators to gain a thorough understanding of how Homework Hotline is being promoted internally.

The final component of the protocols sought each stakeholder's perception of the quality of assistance provided by Homework Hotline.

THE TUTOR PROTOCOL

For the tutor protocol, the team asked the tutors about their personal experience working with Hotline. Questions such as how long they had worked there and why they chose to work there helped the team understand the background of the tutors. The tutors were also asked about the strategies they used for tutoring, the resources available to them for their tutoring, and the challenges they faced with tutoring over the phone.

The tutors are asked to administer pre- and post-tests to each caller to see if the caller has mastered the concept. The interview protocol sought the tutors' opinions of that aspect of their tutoring.

The tutors were also asked about the incentive programs including how incentive programs affected call volume and content as well as the tutors' opinion of the incentive programs. Finally, tutors were asked about what they considered to be the strengths and weaknesses of Homework Hotline. The protocol also asked for information about the tutor's background such as number of years teaching and experience with in the classroom versus tutoring.

THE STUDENT PROTOCOL

The student protocol (See Appendix 13) asked the students how they found out about Homework Hotline and why they chose to call Homework Hotline. The team sought information on how frequently the student calls homework hotline, how difficult it was to get through to a tutor, what the student would have done had

he/she been unable to get through, and what, if any, other tutoring programs the student has attended.

We asked the students how the incentive programs influenced their use of Homework Hotline. Finally, we probed each student to tell us about the quality of assistance they received from the Hotline tutors. We also elicited suggestions for ways that Homework Hotline could be improved.

THE PRINCIPAL, COUNSELOR, AND TEACHER PROTOCOLS

The administrator, counselor, and teacher protocols were very similar (See Appendices 10-12). We designed the questions in order to understand the school personnel's knowledge of Homework Hotline as well as their understanding of how the organization worked.

We asked all three groups how the information about Homework Hotline was disseminated in their school and how they felt it could be improved. The team wanted to know those stakeholders' opinions on how frequently Homework Hotline should send out promotional materials and what was their preferred way of receiving promotional materials. We wanted to know if school personnel were aware of the incentive programs that Homework Hotline offers.

For the teachers, we probed them about their experiences with their students calling Homework Hotline. We wanted to know if they felt Hotline was effective in helping their students. We asked teachers to give us examples of ways that Hotline supported their classroom instruction.

Finally, all three groups of school personnel were given the opportunity to explain the strengths of Hotline and what suggestions they had for improving Homework Hotline. We also collected data on the number of years they had in education as well as the number of years in their current position.

QUANTITATIVE DATA COLLECTION

The quantitative data collection started in August 2010 when Hotline first began accepting calls for the 2010-2011 school year

and continued through November 2010. Data were collected on each call that came into Homework Hotline. However, we only gathered data on the MNPS middle schools. We were also able to add questions to the intake sheet regarding our research questions.

The tutors completed by phone an intake form that lists the following information: name of Homework Hotline staff member; date; time; duration; student code name; whether caller is first time caller, repeat caller, or parent/adult; grade level; language spoken at home; language staff person used in taking this call; the school the student attends; the subject; student's teacher's name; book used for tutoring; reason for the call; where student would get help if unable to get through to Homework Hotline; incentives (if awarded); was the call resolved; did student show mastery of concept. (See Appendices 7-9)

The following day, all the information from each call was logged into the Homework Hotline database. For the quantitative portion of our study, the data from August 2010 thru November 2010 was saved in a spreadsheet, and then the data were uploaded into SPSS so that it could be analyzed.

In addition to using the data collected by Homework Hotline, the capstone team used additional data from the Tennessee Department of Education's website in order to gain a more thorough understanding of the context of the schools chosen for the study. The data included Metro Nashville Public School's (MNPS) demographics as well as the demographics of the four middle schools chosen for the study. This demographic information included: total enrollment; percentage of male/female students; student/teacher ratio; whether or not the school was a Title I school; the attendance rate; whether or not the school was considered to be economically disadvantaged; the number and percent of each ethnicity and/or race; NCLB status, and finally, the number and percent of the students who were English Learners.

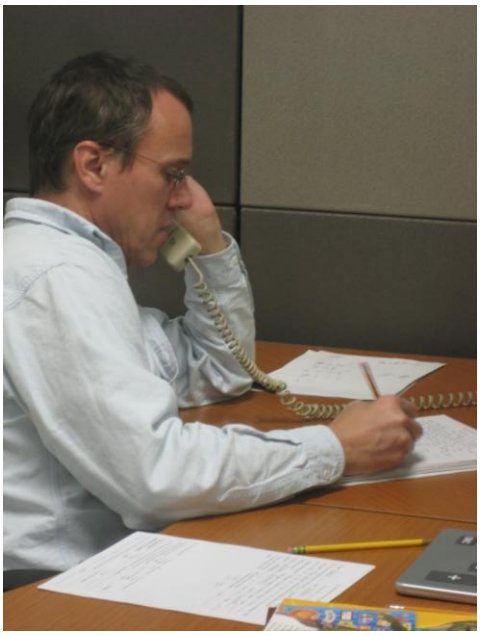
LIMITATIONS AND CHALLENGES

We conducted our research at Metro Nashville Public Schools since the majority of Homework Hotline callers attend MNPS. The data collection efforts in Metro are under the auspices of the MNPS office of Research, Assessment and Evaluation. One limitation was that the schools were not randomly selected; they were chosen by the Director of Research, Assessment and Evaluation.

Another limitation to our study was that the teachers were not randomly selected. The teachers we interviewed were selected for us by the building principal. The method the principal used in selecting the teachers was not clear. Ideally, it would have been best if we could

have interviewed teachers from a variety of disciplines who frequently recommended Homework Hotline as well as teachers who did not recommend Homework Hotline.

The students who were interviewed for this study agreed to be interviewed after they had finished talking to a Homework Hotline tutor. Interviewing the students right after they had received help through Homework was a threat to external reliability because it is possible that the students may have given us answers that they believed were more socially acceptable. The researchers tried to emphasize that the students' answers were confidential, but the setting could have influenced their answers.



Another limitation was the selection bias of the students interviewed. Only those students who wanted to be interviewed and whose parents were available to grant permission were interviewed.

FINDINGS

Homework Hotline is utilized by a wide variety of students in the MNPS school district as well as other districts in Tennessee. The team has studied the various demographic rates of MNPS and compared those trends to the findings in Homework Hotline. We have also compared utilization rates of Homework Hotline among students in MNPS. As the team has spent time analyzing the qualitative and quantitative data the findings seem to cluster around five main areas of study:

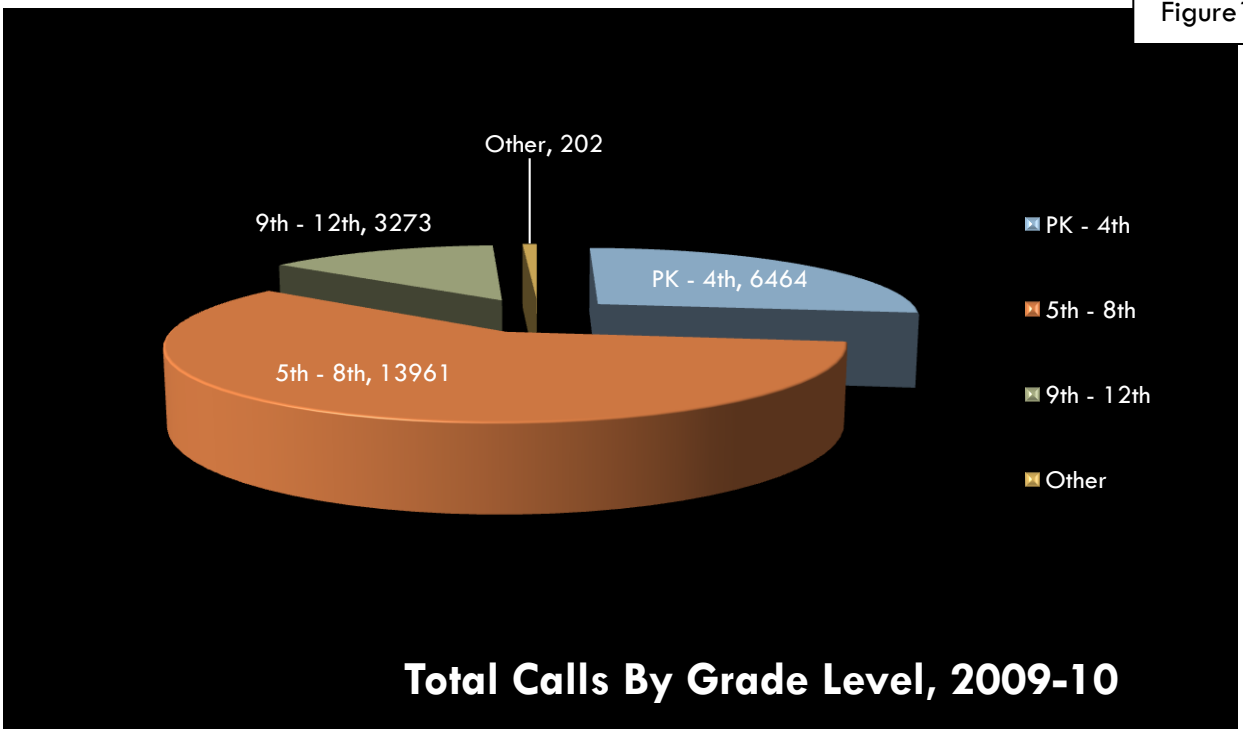
- Mission
- Marketing
- Resources/Capacity
- Instructional Quality
- Student Outcomes

MISSION

The mission, as defined by Homework Hotline, is to provide "one-on-one free tutoring by phone to Tennessee students and parents. With Homework Hotline, students tackle new concepts, complete challenging assignments, and gain academic skills." (HH 2009-2010 annual report) The first challenge in the study began with the team attempting to understand how Homework Hotline operationalizes its mission. After interviewing dozens of participants, we looked for common understandings between these groups. However, we were surprised to discover a lack of continuity in responses between Homework Hotline stakeholders and MNPS stakeholders. This was a finding in itself. There was an inconsistent view of Homework Hotline and the services it provided between the two groups of stakeholders. Furthermore, neither group viewed the mission as is stated in public documents.

Homework Hotline employees expressed that their true mission is helping the underserved/lower socioeconomic residents in the MNPS community. They desire to help those who are struggling in school, with no one to turn to, and that needed the help to succeed. This was a universal belief of Homework Hotline personnel despite its stated mission reflecting broader goals. While they are willing to serve any student or parent who calls, they target the most challenged schools in MNPS. When employees spoke of this emphasis, they did so with a sense of pride and mission.

Figure1



Data received from Homework Hotline, 2009-10 Annual Report.

On the other hand, MNPS employees did not have a clear understanding of the mission of Homework Hotline. Across all schools, there was a remarked lack of understanding about Homework Hotline. At best, they knew it was a place students could call for help with their homework. However, a common assumption was that high achieving students would use the service as opposed to students at-risk of failing. None of the school employees from Nashville Middle School (high usage school) and Williamson Middle School (medium usage school) knew that their students called more frequently than other middle schools in the district. They believed that the service would be employed by some other demographic than their own.

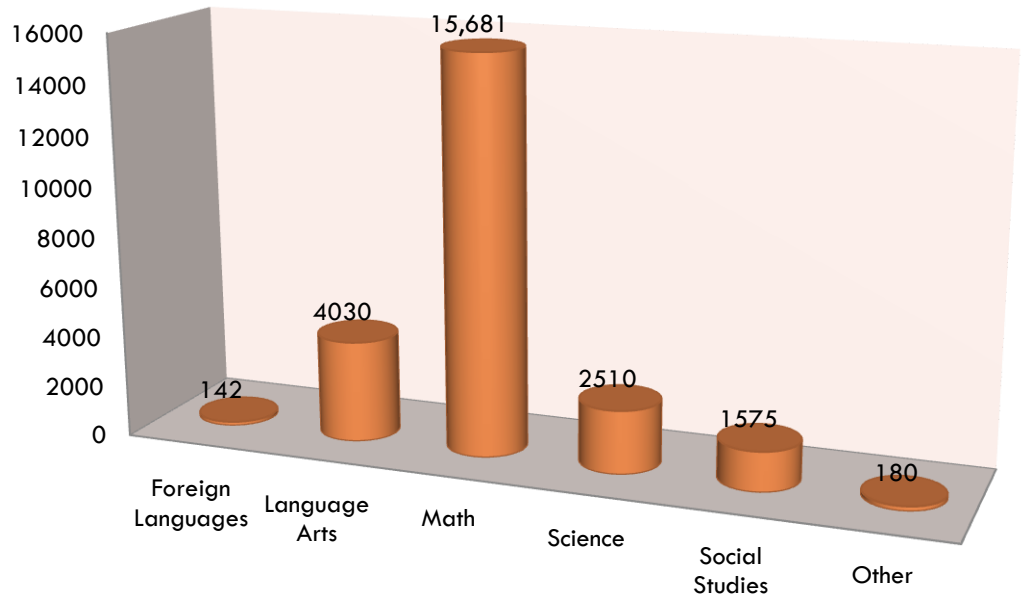
Through the data we collected, we sought to better understand the typical student who uses the services of Homework Hotline. We looked across all the 2009-10 call data and found that middle school students used Homework Hotline most often. (Figure 1)

We also found that math was the most frequent subject that students called about. Approximately 65 percent of all tutoring in MNPS middle schools is in the field of mathematics. (Figure 2)

Finally, while the organization offers tutoring in multiple languages, English was still the predominant language requested. From these data, we discovered the following four characteristics of the typical caller:

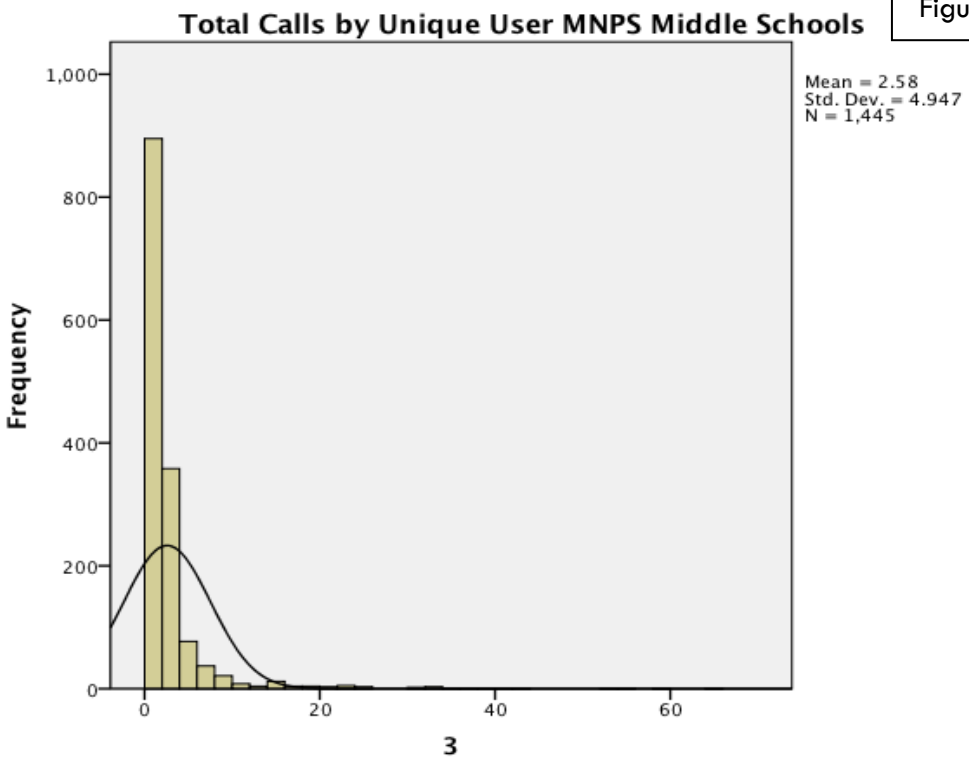
- MNPS student
- Middle school student
- Calling about mathematics
- English-speaking

Figure2



Data received from Homework Hotline, 2009-10 Annual Report.

Figure3

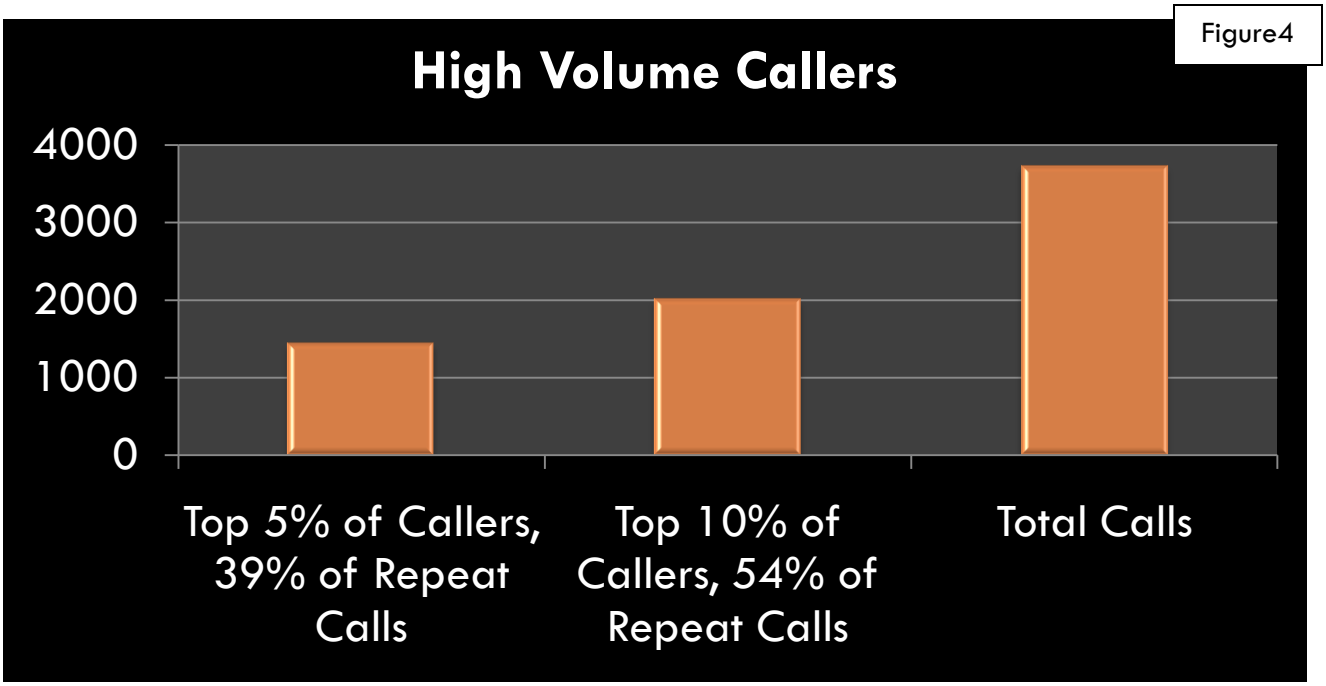


Data Collected from Homework Hotline August 2010 – November 2011

These student characteristics represented a minimum of 58 percent of the total callers to Homework Hotline. For this reason, the team narrowed its study to the middle school students who attended a MNPS school.

We also examined call patterns of MNPS middle school users of Homework Hotline. Through this process, we found another characteristic: most students only called Homework Hotline one time. Between August 2010 and November 2010, a total of 3,725 calls were made to Homework Hotline by fifth through eighth graders in the middle schools of MNPS. By the end of November when this data had been collected, Homework Hotline had been open approximately 52 evenings. The 3,725 calls were made by only 1,445 unique users. The above figure (Figure 3) shows the distribution of this data. The histogram is skewed positively because the vast majority of callers, about 900 of the 1445 users, called only one time. Therefore the modal value is one, the most common number of calls. The same call pattern exists at the individual school level. (Appendix 22) However, since these data represent only the first few months of the school year, it is possible that the data distribution could change over time.

Figure4



Data received from Homework Hotline, August to November, 2010.

When taking a closer look at the histogram in Figure 3, there are a pocket of frequent users that are masked in the tail of the normal curve. We looked closely at this group to see if there were any trends. Using a power statistics model, we separated out these frequent callers. (Figure 4) We first pulled out those users who called eight or more times and determined what percent of the frequent callers they represented. We found that these comprised the top 5 percent of callers, 79 in all, and that thy made 39 percent of the repeat calls. Next, we pulled out those users who called four or more times and made the same calculations. We found that these callers made up the top 10 percent of callers, 193 in all, and represented 54 percent of all repeat calls during this time period. Therefore, there exists a small group of frequent callers to Homework Hotline. These are the students that Homework Hotline describes so warmly in their qualitative interviews. The bonding and relationship building with these students is the most positive part of the work done at Homework Hotline.

In some ways, Homework Hotline is achieving its mission. They do provide free phone tutoring to students throughout the state. They offer tutoring in all subjects and at all grade levels. They seek to offer help for anyone that calls for any reason. However, given that most students call only one time, it is unclear if they are serving effectively these students. The typical caller is an English speaking, MNPS middle school student, who calls only once for help with math. However, there are a small group of students that call with frequency and are receiving satisfactory help (as evidenced by repeat calls.)

MARKETING

Homework Hotline seeks to market itself across all schools in MNPS (plus eight surrounding counties.) The organization takes a shotgun approach to advertisement using a variety of methods. One method is through direct advertising. Homework Hotline receives 200 minutes of airtime from various TV networks on which they produce commercials promoting Homework Hotline. (In exchange, these broadcasting networks obtain advertising on all Homework Hotline materials.)

The organization distributes 375,000 Homework Hotline stickers to students in schools. (See Appendix 3) These fluorescent orange stickers list the hours of Homework Hotline, the phone number, and all the sponsors that support the organization. The stickers go to each school and are accompanied by posters for the school as well as other informational pieces about Homework Hotline. The organization also distributes annually 500 posters for schools to post around the buildings. Finally, Homework Hotline publishes a newsletter that is also distributed to schools that are served. Some materials are sent to the superintendent who distributes prepackaged information to the individual schools. Other materials are sent directly to the schools. The Homework Hotline administration also delivers materials to save on the postage costs.

In order to understand the effectiveness of the marketing to schools the team interviewed four MNPS middle school principals. The interviews were very similar across the four schools. All of the principals admitted that they knew very little about Homework Hotline. "Students call in and get help with their homework." Beyond that type of statement, there was little else shared. Despite varying usage rates, the principals consistently admitted their lack of knowledge of the center or about student participation rates with Homework Hotline from their own schools. In fact, in the school that had the highest number of callers, the principal stated that she was sure her students did not use Homework Hotline.

The principals did their best to answer the questions but often added "I'm not sure…" or "If I had to guess" statements. One principal reported to the team that the Homework Hotline materials were distributed to teachers and students at the beginning of the school year; the same day, her teachers reported just receiving the materials the week they were interviewed, which was in the middle of the first semester of school.

While not a great source of information regarding perceptions of Homework Hotline, the fact that all of the principals did not know about this organization is a research finding of its own. The administrators of Homework Hotline believe they market well to the principals of schools

about their program. It appears that those efforts by Homework Hotline, at least in the four schools we visited, are not presently successful.

No posters or any other materials regarding Homework Hotline were displayed in the schools visited. The principals never saw, distributed, or promoted the center in any fashion. However, almost every stakeholder recognized the brand of the Homework Hotline sticker. That is the one marketing material that seems to have universal recognition.

None of the principals look at the promotional materials when these arrive at the school. Without direction, the secretaries at the schools distribute the materials by placing them in teacher mailboxes. They are distributed usually at the beginning of the year with the myriad of other beginning-of-school documents. The principals were never brought into this process. The principals implied this was acceptable and did not report a need to be involved in the process.

Without endorsement or direction, this leaves promotion and understanding of Homework Hotline at the discretion of the front office staff and teachers. No communications go out from the principals endorsing the materials or instructing what they are and why they should hand them out. The teachers interviewed expressed a desire to have an explanation for the materials.

The teachers remembered the Homework Hotline sticker but, for the most part, did not promote it. They just passed the sticker out with all the other handouts. "It is in the bottom half of the pile. We don't have time to go over everything." Because they do not know a lot about Homework Hotline, they would like to be able to tell the students exactly what the center offers. This leaves the student to determine whether or not the sticker has merit and whether or not to affix them to their notebooks or textbooks. The students interviewed heard about Homework Hotline through the stickers that are handed out at school or through a friend.

Homework Hotline distributes various educational prizes to schools as well. They mailed out 22,000 African American History calendars to seventh graders in MNPS. They also give out complete school supply sets for 875 low socioeconomic status children each year. Additionally, 30,000 fourth graders receive multiplication flash cards. Students in K-8 schools tend to get educational games/prizes and high school students receive dictionaries. However, when interviewing students, they told us the prizes were not a source of motivation to call Homework Hotline.

The administrators encourage greater participation in tutoring through various promotions such as "prize nights." They state that they "intentionally target prize nights to schools with greater than 70% free and reduced lunch,

with high English learner populations, and with NCLB labels that indicate schools not making annual yearly progress (AYP) or 'failing'." The director stated that the schools most resistant to collaborating with Homework Hotline for prize night promotions are the schools failing to meet AYP. She thinks that "they feel badly already" and the help of Homework Hotline may just continue to highlight perceived school failure.

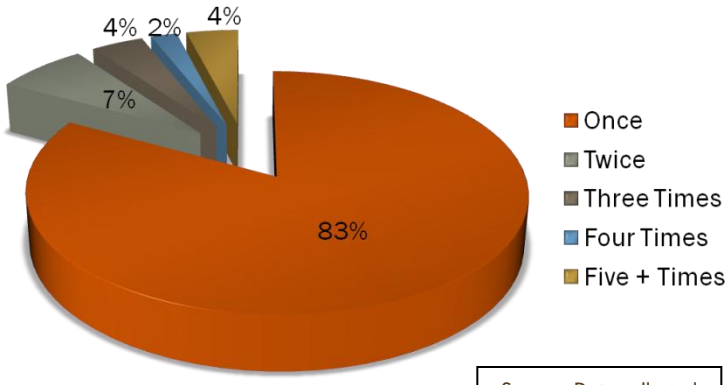
The counselors expressed a desire to be targeted by Homework Hotline. They are on the front lines working with students who need help. Parents call counselors requesting the names of tutors and recommendations for how to get help for their students. Counselors can give the recommendation of Homework Hotline at a time when the student knows he needs help. One counselor said, "We are here to help. Use us!" One suggested Homework Hotline create a counselor email group and send regular emails to them about what is going on with Homework Hotline. "It is free and so easy." One counselor also suggested a magnet in addition to the stickers could be created to put up on the student's refrigerator. Suggestions offered for classrooms were posters to communicate the goals of Homework Hotline and how students may use the organization.

Finally, there is potential evidence that Homework Hotline is promoted by word of mouth. Students interviewed mentioned that their friends used this service. It is possible that students who have called in tell their peers about the resource that is freely available to them. Parents, teachers, counselors, etc. may also spread the word if they are familiar with the service. It is not possible, though, at this time, to determine the effects of this type of promotion.

RESOURCES/CAPACITY

Homework Hotline has many resources in place to sustain present levels of tutoring. The organization has a permanent space in the Cohn Adult Learning Center donated by the MNPS district. The only downfall of this space is the availability of the location on weekends when there may be a large demand for tutoring by students. This space offers a great opportunity for permanent storage of the textbooks and prizes but also provides a space for relationships to build between the tutors. There

NUMBER OF TIMES CALLING BEFORE REACHING A TUTOR



Source: Data collected at Homework Hotline: August to November 2010

is a perception of a "family environment" at Homework Hotline which leads to a comfortable working environment. The tutors have a warm regard for one another and there is a jovial spirit that characterizes the center.

CALL VOLUME

Homework Hotline receives 24,000 calls per year. The administrators believe that the center has insufficient phone lines and staff to meet the needs of incoming calls. They stated that students are often not able to get through because of a busy signal when calling. (They have about 17 tutors working at any given time and limited phone lines.) If the organization had more phone lines, space, and staff they could serve more students. It appears they cannot meet the demand of callers during operating hours. That being said, the director talked about the balance between quality and quantity. Homework Hotline's focus used to be taking as many calls as they could. The organization changed that philosophy when they added the pre-tests and post-tests. These informal measures lengthen the call time but are in place to help ensure assessment and mastery of the topic requested. They now take fewer calls and spend more time with each caller. The executive director wants to offer quality tutoring as opposed to volume tutoring. In her opinion, more is not always better.

There is also a cost to adding phone lines and tutors. By adding four phone lines, she said that would cost the organization $60,000 in tutor salaries at an average of $25 per hour. Given that she must raise 100 percent of the income streams for the organization, adding four new lines is not an easy accomplishment.

The students who call Homework Hotline find they have success in getting through to the phone tutors. 83% of the calls get through the first time. The students interviewed were about half frequent callers (meaning calling more than once) and half first time callers. The frequent callers did not have consistent answers about the "best time to get through" to Homework Hotline.

Some stated they never had a problem getting through and others stated specific times, like, "7:00 pm." Since the answers were all different, there is no conclusion that can be drawn regarding the best times to get through.

TEXTBOOKS

Homework Hotline stocks its shelves with textbooks from all of the MNPS schools. This is helpful when working on problems/questions that come directly from the book. The only difficulty arises when a student calls regarding a problem that is not in the textbook. One teacher cited "Wordly Wise" – and the fact that they know the tutors can't help without that workbook in front of them. If the teacher is using a homemade worksheet or a workbook that is not stocked by Homework Hotline the communication between the tutor and the student becomes more difficult.

Beyond school supplied resources, the tutors have calculators, paper, and pencils. There are a couple of central computers for the administrator and staff to input data. The tutors can access these if needed but must place the student on hold while they search for information. The tutors compensate intuitively for the lack of resources, e.g., asking the student to read to them a passage, asking the student to spell out words they cannot pronounce, asking the student to draw a diagram that goes with a math word problem, etc.

TECHNOLOGY

Though each of the tutors felt the service was beneficial to the students, they also felt that Homework Hotline could be improved through technology. A common frustration expressed by tutors was that the phone-in tutoring limits tutoring to operating without sight. Tutors have difficulty communicating with the students only verbally. The students present various problems, especially in the math and sciences, which are hard to work through without visual means.

The need for technology was also expressed to assist the tutors in looking up quick answers to problems while they are on the telephone with students. For example, one tutor

explained that if the student is working on a history essay and the tutor needed to know the seventh President of the United States, it would greatly assist the tutor if he was able to look up the fact on a computer. Though there are a couple of computers in the Homework Hotline office, they are used by administrators. The tutor must physically walk away from their call, request to borrow the computer for a moment, search for the information they need, walk back to their cubical, and then convey the information to the student. This is not an efficient practice.

It would help the tutors if they were able to have a computer at the desk where they work in order to answer questions in a timely fashion. Presently all data are kept by pen-and-paper and transferred by an administrator to the computer. Only the administrator looks at or utilizes these data. Additional data could be kept and the accuracy would increase if the tutors were keeping the data rather than the information being transposed later.

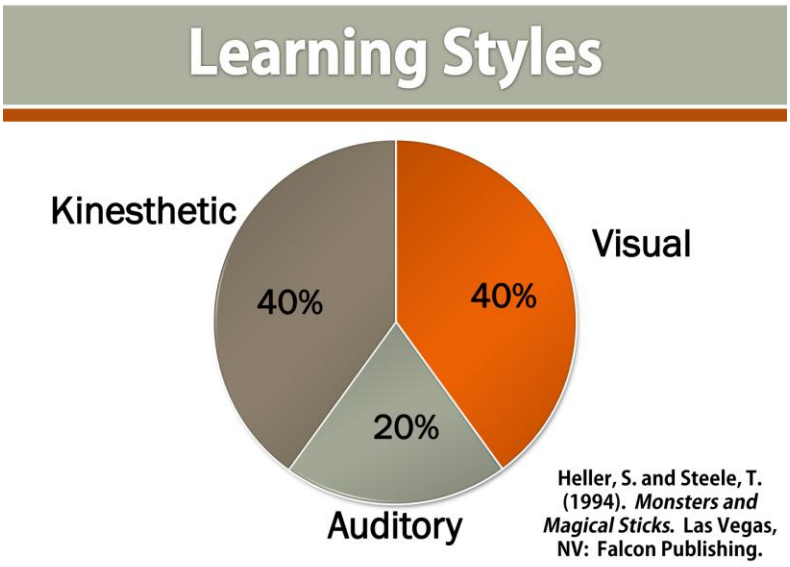
The teachers did not understand why Homework Hotline was still using phone tutoring with the availability of technology as a resource. All the teachers insisted that most of their students did have computers at home and utilized them greatly. This theme resonated strongly through all schools we visited, whether it was from a community a middle class socioeconomic group or low socioeconomic status group.

Teachers talked about their own websites and the wealth of information available on the sites for students. The student textbooks now come with online tutorials and games. Their websites have links to Study Island (an online practice/tutoring source), Discovery Ed (another online tutoring resource), and other excellent tools to give students help in mastery of concepts. The students do get help through these means perhaps minimizing the need to call a tutor at Homework Hotline. Again, the teachers discussed the utilization of computers across the board by all of their students.

Teachers also talked about the limitations of phone tutoring in general. “Students just don’t use phones anymore to talk. They text.” Various teachers made recommendations like using a chat room, IMing, virtual tutoring, etc. They recommended that Homework Hotline try to leverage the new technologies that students take advantage of on a daily basis. Furthermore, the teachers expressed concern that through the phone, only students who are learners will benefit. “Only a small percentage of students are auditory learners. Most are visual or kinesthetic learners.” The teachers commented on the difficulty of learning only in an auditory manner when so many of the students are visual or kinesthetic learners. The teachers expressed that Homework Hotline could be a good resource for basic skills that require lower order thinking skills. However, they did not believe that the center would be the best place to go for

higher order thinking and more abstract learning. Again, this was often commented on due to the singular mode of auditory learning.

Tutors expressed frustration as well with the amount of time spent on gathering data for the intake sheet. "We waste so much time collecting information." The addition of technology would allow records to be maintained on callers and cut down on the time calls by simply looking up the student's code name.



Heller, S. and Steele, T. (1994). *Monsters and Magical Sticks.* Las Vegas, NV: Falcon Publishing.

INSTRUCTIONAL QUALITY

However, even with the problems in front of both the tutor and the student, difficulties arise in explaining steps to break down a problem, especially in the math and sciences. For example, one tutor described this problem with long division. In placing a number in the quotient, if there are multiple "fours" in the dividend or in the problem, it is difficult to explain to the students to which "four" the tutor is referring.

$$44\sqrt{764904}$$

Another example given by a tutor was in the area of language arts. "When a student has a passage to read or a list of spelling words that I don't have in front of me, it can be difficult. They pronounce the words wrong, I can barely hear them, and I don't know what they are talking about. I end up having to have them spell things out for me. This becomes very time consuming." The tutors expressed that it would be easier to help students if the tutors were able to utilize technology in some way to assist in their tutoring.

Tutors were asked about teaching strategies used over the phone. The most common answer was to offer practice and guidance during practice. All teachers responded that they had their own personal methods of working with students; there was no philosophy or directions given by Homework Hotline on best teaching strategies over the phone.

One teacher described her methods this way: "I use the WDYK (what do you know) method. I start there and then make up my plan of attack." Another described the importance of connecting with the student first. "It is through relationships that you can get the children to learn." Still another tutor described how he tried to connect ideas, e.g. when teaching division, he explains it is the reverse of multiplication. Many tutors discussed the difficulty of figuring out what was stumping the child. They relied heavily on their "gut." Other strategies mentioned include asking the student to "check it again," prompting, asking students to "do the next one for me," and simply trying to learn what they know.

The tutors were less sure of how they support teachers in the classroom. They do not know the teachers, their methodologies, or their expectations. They do their best to support them. One tutor described their support of teachers in the schools this way: "We provide extra one-on-one help, we keep the kids moving forward, that's about the best we can do." The tutors hope that they are reinforcing the same concepts that are being taught in the classroom. This is often difficult to substantiate since the tutor must find out from the student what is missing.

Tutors also became discouraged when confronted with statements like "but that's not how my teacher taught me to do it." Tutors expressed a desire to support the teaching methods of the students' teachers but felt ill-equipped to help students when their method differed significantly from how the student had learned how to complete their work.

Some students did communicate confusion when trying to match a concept with a problem they had on their homework. This occurred mostly when the tutor explained the homework differently than the teacher had in class. Some teachers require students (especially in math) to complete their homework in a particular way. The tutors are not always aware of these special requirements. One student expressed frustration: "I have to do the problems the way my teacher wants them done and my tutor didn't know how to do them that way."

The same issue seemed to exist among the teachers. The teachers expressed a fear that Homework Hotline often will teach students a different way to solve problems or understand the material than that given in class. "I am afraid they may confuse my students." Teachers expressed hesitancy in promoting the organization for these reasons.

As the team interviewed the students we attempted to discern the students' perspectives on truly understanding the material versus simply completing the homework. Understandably, many of the students felt that this was the same thing. However, one student said "my teachers make this hard, the Homework Hotline tutor made this easy." Overall, the students believed

that they had a successful experience from the tutors of Homework Hotline.

Tutors also described their aggravation with many of the students who call simply with the desire to complete their homework. With these students, their main objective is to complete the work and they are not concerned with understanding. Students, according to the tutors, simply want to be given the answers. Despite encouragement and prodding, tutors were not always successful in inspiring students to understand the material.

Many of the students will often call multiple times in order to get the tutor that they like best or feel is a good tutor. Several of the students mentioned getting tutors sometimes that could not help them or worse, would teach them incorrectly and validate an incorrect answer. They would call back until they got someone who "knew what they were doing." One student suggested "It is confusing to get two different answers from different tutors. I think they should have one person to do one job."

As mentioned elsewhere, Homework Hotline employs pre and post assessment procedures to determine if the students were successfully helped. The tutors begin their sessions by inquiring what type of help the student needs. On their intake sheets that they complete for each caller, the tutors list the purpose of the call and the type of help the student needs. The most common reasons for calling are: test preparation, homework check, help with specific homework problem, unclear on an entire concept, and behind grade level in a subject.

After tutoring the student, the tutors give the students some additional problems to solve or questions to answer. If the student can independently solve the additional questions, the tutor marks on the intake sheet that the student has mastered the concept. While at times the students are not marked as mastering the concept, for the most part tutors stated that they are successful in their endeavors.

The only weakness in these forms is that the assessments were not formally designed. The teachers made them up based upon the individual caller. Unfortunately, most of these assessments are not tested in effectiveness and the tutors often depend on simply a "gut check" on whether the kids gained any understanding at all. It would be helpful to have a bank of pre- and post-tests developed by researchers or practitioners that apply to the various concepts of each subject area. Additionally, many of the tutors felt that these pre- and post-tests felt like wasted time instead of delving into the issues in which the students really struggled.

Students were also asked whether or not they felt like their grades were impacted. "I have all A's and B's." Another said, "they help me get higher grades on my homework which helps with my grades overall." None of the

students said that calling Homework Hotline did not help their grades, only their level of enthusiasm varied by caller.

The lack of visual contact with the students can be a positive feature for some students. This anonymity on the part of the students can bring ease to the calls by those students who may have difficulty in class asking questions. The tutors suggested that due to the anonymous aspect of Homework Hotline, students feel more comfortable asking what they might consider a "dumb question" in class and in general feel less intimidated asking questions. Therefore, students who may be overlooked in class or be too shy to ask questions could be better served in a non-visual, anonymous environment.

It was also noted that often relationships develop between the tutor and particular students. Many of the students are repeat callers and request to work with the same tutor over time. This relational atmosphere is an important part of Homework Hotline both between the tutors and the students. Most of the tutors stated that they "loved" the "I get it" moment when their students have a breakthrough in their understanding. One tutor said, "I love working with students and feel great when they finally 'get it.' There is a great satisfaction in helping them get to that place of understanding." Another tutor said "I love being able to help a child get through their homework successfully, knowing there is no one else around to help them."

All in all, the students' perceptions of Homework Hotline were consistently positive. The students almost seemed to have a loyalty to the organization and felt like Homework Hotline assisted them positively in their schoolwork. The students were advocates of Homework Hotline and, overall, would continue to call the organization for academic assistance.

PERSONNEL

The tutors described different reasons regarding why they chose to work for Homework Hotline. Some reasons given were simply financial; it is a good paying job that provides additional income. (Teachers are paid $25 per hour as a tutor at Homework Hotline. However, MNPS pays for their teachers directly to work at the center.) Homework Hotline staffs 70% of the shifts with MNPS teachers. A little over half of

the personnel are MNPS teachers but these personnel work more hours and man the most shifts.

Tutors expressed that they liked the hours that Homework Hotline is open and it supplemented well their hours as a classroom teacher. Most, however, described their desire to tutor because of the same intrinsic rewards that teachers find in the classroom. Regardless, the tutors seem extremely committed to Homework Hotline and their roles within the organization.

Both students and tutors expressed the desire for better pairing for a tutoring session. Both groups shared frustration when a student is not paired up with a tutor who can successfully help him. At the administrative level, the process of assigning tutors to calls should be re-evaluated. Perhaps by having non-tutors gather all the intake data, tutors could be more available to help the students. Also, having a non-tutor attempt to understand better what sort of help the student needs, better pairing could occur.

The tutors discussed that it would be beneficial to them if the students were better paired to a tutor in the area of difficulty. Sometimes the students call regarding one subject matter but there is no tutor available who is the expert in that field. When this happens, the call is transferred to the next closest tutor who may be able to help them. The tutors expressed frustration that they were not able to better help the students who called. "I feel badly when a student calls and I cannot figure out how to solve the problem they need help with." Matching expertise to student need would better help students who call for assistance. Of the students who called multiple times, they desired a tutor who they had felt success with previously or had a relationship with from previous phone calls. The students did not communicate that they had a difficulty with this process and were able to get the tutor of their choice after a few phone calls. Furthermore, these repeat calls to get a preferred tutor may inflate the total number of calls by frequent callers.

Tutors mentioned frustration with parents who are more concerned with the number of minutes on their cell phone than their child getting help with homework. Stories were shared about, while a student was being tutored, hearing a parent in the background yelling at the child to "hurry up" and not "waste" the minutes on the cell phone. One tutor said, "It is so frustrating. How can I help this child when she has no support at home? I feel a sense of despair."

There is a difference between a teacher in the classroom and the ability to be successful as a phone tutor. Due to these differences it is often difficult for the tutors to switch to the different roles. Also, new tutors need additional

training to learn to take the skills from the classroom and apply them differently as a tutor. Though there is an orientation session at the beginning of the school year, that time is mainly designed to help with the logistical aspects of tutoring.

Despite these collective frustrations, the tutors were pleased with the services Homework Hotline offers. They feel like they are making a difference in students' lives. They enjoy working at the center and have a desire to find ways to improve the services that they offer. They find Homework Hotline to be a worthwhile community resource.

STUDENT OUTCOMES

The team interviewed 17 middle school students from MNPS. Overall, the students interviewed were very complimentary of Homework Hotline. As one student said, "When I get help, I get a better understanding and know how to do my work. This makes me feel more confident." They all stated that Homework Hotline helped them in not only completing their homework but gave them a better understanding of the material. "The tutor was a great help. I understand a lot better now."

The executive director and all of the tutors were animated in describing their relationships with the students. These frequent callers seem to develop a wonderful relationship with the organization and continuously call Homework Hotline in order to be successful in their academic program. Every one of the students interviewed described a positive relationship with Homework Hotline and the services it provides.

THE DISCONNECTS

During the process of analyzing the qualitative and quantitative results it seemed that there were some disconnects between the views of Homework Hotline and the views of other stakeholders. These seemed to be focused around the following four areas:

- High Achieving versus low achieving students
- Student access to technology
- Promotion and understanding of Homework Hotline
- Accessibility to other assistance programs

HIGH ACHIEVING VERSUS LOW ACHIEVING STUDENTS

The administration of Homework Hotline firmly believes that it is the goal of Homework Hotline to support the at-risk students in low SES neighborhoods who are often from failing

schools. If the goal of the organization is to target these youth, the Hotline might want to consider a different branding and marketing approach.

When guessing the type of student that may call Homework Hotline, the teachers generally believed the typical student would be a high achiever. The teachers believed that only students who are truly motivated would go through the hoops required of calling Homework Hotline. "Students that call, care." Another teacher said that the students who call are "well-rounded and goal-oriented kids." Interestingly, the magnet school did have the highest number of callers in the study.

The low achievers do not have the motivation to use such a resource, teachers told us. "They don't do their homework and don't seem concerned about that." The teachers did not feel that their students who struggled were the ones who called Homework Hotline.

The students interviewed in this study seemed motivated and sought, for the most part, understanding. None of the students interviewed were doing poorly in school. While Homework Hotline seeks to help students who are at-risk, the team came across no evidence that they are reaching this type of student. Our interviews may lend credence to the belief that it is the motivated students who utilize this tutoring service.

Student Access to Technology

An important misperception that needs clarification surrounds the issue of the students' access to technology. There seems to be a strong disagreement on the accessibility to technology in the home by MNPS students. Principals, teachers and counselors believe that the majority of students have access to technology. According to the teachers, the students are required to access the teachers' websites in order to know their homework, download assignments, and know about upcoming tests. The students are able to access technology outside of school in order to complete these assignments and teachers have never heard of the students' inability to access these items. This information was consistent from all levels of socioeconomic status.

This perception that students have computer/Internet access is in contrast to the perception of the Homework Hotline administrators. Homework Hotline believes that the majority of students do not have access to technology in their homes. As a result, the administrators are hesitant to switch to a more on-line approach to tutoring.

STUDENT ACCESSIBILITY TO OTHER ASSISTANCE PROGRAMS

Homework Hotline desires to serve the lower socioeconomic students who have no other place to go for help. The teachers seemed to feel that the kids often used the after school tutoring services of the school as well as the wider community, such as the local YMCA. But, Homework Hotline is available for the students when there is often no other service available. The teachers discussed the many other resources for the students to get assistance. The schools offer many in-house resources for students during the school day, e.g. tutoring by their own teachers in both group and one-on-one settings. The schools also have before and after school tutoring. One school even has a learning lab that the students can go to during the day to get extra help.

Teachers stated that they are in constant communication with parents and that a lot of student academic confusion is cleared up through this relationship. Finally, many students have tutoring options in their after-care programs, e.g. YMCA or Fun Company. With so many options available, the teachers expressed the view that Homework Hotline may be an old technology, or even "obsolete" as one teacher put it.

The principals also believed that their students did have other avenues for help. Many go to after-school programs that have homework help imbedded into the program. Others go to various community centers. Also, the principals stated that they provide resources at their own schools to help students. They believed their students already have access to the help they need to succeed. The students just have to take advantage of it. The principals did not believe that their schools were natural sites for students to regularly use Homework Hotline.

The team questioned the students about where they would go for help if Homework Hotline was closed. Most students replied that they would not be able to do their work. However, many of the students stated that they did have other resources for help but those resources were not available at that moment. "My dad usually helps me but he is not home right now" or "my brother usually helps me but he is doing his own homework right now" were a couple of responses we received. Therefore, for these students, the on-the-spot availability was very desirable. In none of the cases was a student told to call Homework Hotline. All students took the initiative on their own. This could be an indication that these students are motivated higher achievers. Nevertheless, the students seemed to have access to a multitude of assistance programs both at the school and in the community.

PROMOTION AND UNDERSTANDING OF HOMEWORK HOTLINE

A common misperception among the teachers was the belief that Homework Hotline is run by college students who volunteer for the organization. This concerned the teachers we interviewed and they expressed the desire to have "good help" for their students. When the team explained that the tutors were actually teachers the perception changed dramatically. This discussion then led to a belief among the teachers interviewed that Homework Hotline needs to better promote understanding of the organization. This is an interesting fact given that MNPS pays its own teachers to staff Homework Hotline.

When interviewing the principals, counselors, and teachers at the middle schools there was a great similarity in responses among the schools despite their various usage rates of Homework Hotline. The team anticipated that we would find better marketing of Homework Hotline at the high usage schools than the lower usage schools. Instead, all respondents gave nearly identical answers across the board. While there was some variation between specific stakeholder responses, in general, we found the schools knew very little about Homework Hotline. The only marketing that seemed to universally work were the Homework Hotline stickers which are distributed to the students.

RECOMMENDATIONS

Based on the findings of this study, many recommendations are advised in order for Homework Hotline to achieve its full potential. Overall, the recommendations will be tied to a tightly coupled relationship with MNPS where the two organizations would work in tandem to achieve common goals. Without this focus, Homework Hotline will continue to support a small group of students frequently and without alignment to any goals beyond those of individual tutors. We will organize our recommendations under the same themes utilized in the findings section.

- Mission
- Marketing
- Resources/Capacity
- Instructional Quality
- Student Outcomes

MISSION

Homework Hotline should first reconsider its mission. Presently, they target all students in the state of Tennessee, in grades K-12, and in all subject areas. For an organization with a total of 34 part-time tutors, Homework Hotline simply does not have the capacity to support such a targeted population. As noted, part of the reason for this broad audience is the requirement of corporate sponsors to advertise their logos on Homework Hotline stickers to counties beyond MNPS, e.g. Sonic. As a result, Homework Hotline allows the funders to define its mission rather than letting the mission be defined by the organization. The Homework Hotline executive director seeks to help Nashville's neediest students and students who have nowhere else to turn. This is a worthy goal that could help better focus their energies and increase efficacy.

That said, we recommend that Homework Hotline narrow their mission in two ways. We suggest that they work, first, exclusively for MNPS. Since MNPS is a charter supporter of Homework Hotline, provides space and employees, and seeks to support the students of the district partly through the service of Homework Hotline, it makes sense that their first allegiance should be to MNPS. However, this is still an enormous group to serve given there are over 71,000 students in the district. Since one of MNPS Achieves' main goals is middle school math achievement, we recommend that Homework Hotline specialize in this target area. Thus, their newly narrowed mission could be defined as serving MNPS students, with its main focus and expertise in serving the math students in MNPS middle schools.

This mission is still very large. It would be difficult to serve well all 64 of MNPS' middle schools. Therefore, it is recommended that the organization, in collaboration with MNPS, select a few partner schools to adopt for intensive service. This partnership will be discussed in more detail elsewhere. Also, MNPS Achieves has nine committees that are carrying out the goals of the district. One of these is a middle school committee. It is recommended that the executive director serve on this committee in order to be fully abreast of issues the district is facing and strategies MNPS will employ to help middle school students. Being informed by this knowledge, the director can better align the services of the organization to the students Homework Hotline serves.

Another part of the Homework Hotline mission is maintaining the anonymity of its students. They believe this process makes students feel more comfortable calling for help. However, this anonymity has limitations which will be discussed elsewhere. We recommend that Homework Hotline change their mission to personalize tutoring help partly by knowing who their clients are.

Homework Hotline needs to define as a part of its mission the role of a tutor. The present belief is that they exist to teach the students in any method that works for the individual tutor. It is recommended that this philosophy be examined and redefined. We believe the role of the tutor is to support the education going on in that student's classroom. To best do this, tutors need to understand how the teacher approaches the topic at hand and ensure the students are getting a similar approach. As will be described elsewhere, MNPS' focus on common math pacing guides and math teaching methodology will help make this task easier.

Finally, returning to the idea of funding, Homework Hotline should reconsider this in light of a newly defined mission. First, perhaps MNPS could offer more resources to Homework Hotline in light of the exclusive focus on their students and alignment to their goals. Perhaps MNPS could find additional funding from their own resources to help Homework Hotline fulfill its new focus on the district. Second, MNPS may be helpful in finding community support of Homework Hotline that is currently not giving to the organization. Third, the executive director should newly seek funding from current and potential donors from the perspective of the new mission statement and focus. Those that did not give before may have greater interest with a better focus on particular students than the current shotgun approach to the state.

MARKETING

Homework Hotline should spend considerable time rethinking its marketing efforts. Given a new mission, they should develop a business, branding, and marketing plan. Homework Hotline will need to obtain expertise in developing these documents. A service like SCORE, the Service Corps of Retired Executives, can provide free and personalized help in all of these areas. The business plan should address sources of funding like grants, sponsorships, corporate giving, foundations, and private donations, etc. A branding plan should describe Homework Hotline's overall brand strategy with consistency, inclusiveness, integrated marketing regularity, and inclusion of their brand revitalization. The brand strategy should include brand mapping, core differentiators, brand personality, brand positioning, and brand promise. Homework Hotline may also desire to refresh their logo. A marketing plan will deliver on the branding strategy and should include consideration of materials, website, messaging, social media, and community/stakeholder collaboration. Through effect and coherent planning in these three key areas, Homework Hotline can become a better-known quantity in the greater Nashville area in a way that the organization desires to be known.

Homework Hotline should also consider developing personal relationships with partner schools. The executive director should set up

annual one-on-one meetings with the principals of these organizations and develop a personal relationship. She should seek to understand the unique characteristics of the school and its students. She should learn about how the particular school is addressing the issue of math instruction and achievement. She should seek to understand how Homework Hotline could support the work taking place in the individual school setting. Every school has its unique culture. This understanding is critical to providing quality support.

Additionally, the executive director should take time to present annually at a partner school's faculty meeting. The principal should clearly promote the partnership with the employees of the school. With this support, the teachers will more likely take note of the service and recommend it to the students. The director should further meet with the math teachers to understand how to access teacher made materials, what teaching methods are being used, what weaknesses exist in the student population, how to contact teachers regarding their students, etc. These efforts will go a long way toward creating a collaborative relationship between the partner school and the Homework Hotline tutors.

The guidance counselors represent a powerful resource of connection between Homework Hotline and students in need. These are the employees of the school that have the most comprehensive understanding of students who could use extra support. The executive director should meet with counselors in partner schools as well as target marketing materials to counselors in other schools. The counselor partnership with Homework Hotline can play a central role in identifying and promoting at-risk students, the ones both organizations want to serve the most.

Finally, the executive director should reconsider the timing of deliver of promotional materials to schools. By partnering with schools, promotional materials are more likely to be distributed. However, at the beginning of the year, students and teachers are flooded with papers, forms, and flyers. As a result, the Homework Hotline materials get lost. Stakeholders will be more likely to take note if they are distributed at a time where they will be noticed. Counselors should get their own supply of Homework Hotline stickers (or magnets) to distribute directly to students. This approach may result in students calling because they are alerted to the services when in need of help. Finally, Homework Hotline should abandon their prize give-away campaigns. This would prevent wasted time spent by tutors on phone calls made to simply receive a prize. As for the students interviewed, we found the prizes did not affect their desire to use the service. Much time and resources are wasted on this operation that could be better spent in other ways that better support the students.

RESOURCES/CAPACITY

The most important resources of Homework Hotline are the human resources, i.e. the tutors. As previously described, the only training they receive is a one shot orientation that is logistical in nature. If the tutor exists to support effectively the work of the classroom, then they need training in teaching methodologies that are successful over the phone and that are in support of the work going on in the classroom.

MNPS, as a part of MNPS Achieves, will begin training for its middle school math teachers in content and methodologies that are based in research based best practices. The superintendent believes that by focusing on adult learning, the school system can better support quality education. He is requiring attendance of MNPS middle school math teachers at Saturday classes as well as participation in professional learning communities geared toward providing effective math teaching. We recommend that the executive director participate in this training and even some of the tutors. As a result of this training, professional development could be designed to align tutor support of current pedagogical practices in the MNPS middle school math classrooms.

Additionally, MNPS will provide training for their teachers in English Language Learner strategies. Since Homework Hotline also tutors a proportionate number of these students, we recommend that the executive director and some teachers participate in this training as well. Again, by aligning practices used in the MNPS

school system with those used by tutors, the students will get better support overall.

As is good practice with all professional development, it should be ongoing and evaluated. The executive director should create a professional development plan for the tutors that includes thinking about tutor prior knowledge, best method of delivering professional development, and follow up/support of tutoring in light of practices learned.

Another recommendation regarding Homework Hotline tutors involves developing an evaluation process for the tutors themselves. This process should include development of an evaluation instrument and the collection of data from multiple sources on the efficacy of each tutor. The executive director could listen in on random sessions, observe tutoring in process, speak with students post tutoring, speak with teachers at MNPS middle schools re student success, etc. Without having an evaluation process, it is not possible to determine if the tutors are successful in their work.

An inefficient area noted in the findings involves taking in data prior to tutoring each caller. We recommend a two or three- tiered system for managing callers. If a caller were a first time caller, they would go through the typical data input prior to getting tutored. Ideally, a staff person should complete this intake process so that the time spent by tutors is spent helping the students. After the data are collected, the student could then be pared with an appropriate tutor. The second-tier would be for callers that are repeat callers. These students could be sent directly to the tutor to receive the help they require. A third-tier could be for MNPS middle school partner schools ensuring higher priority for these students. Much of this could be set up automatically so that students, when calling, can make a selection based on what category they fit into.

We also recommend that Homework Hotline consider better ways to pair their tutors up with students. Presently, they operate on a first-come-first-served basis. Because students are paired based on what tutor is available, they can be sent to an English teacher who thinks they can tutor basic math. Given that students did indicate they would call back until they get a tutor who can help them, it makes sense to work efficiently pairing students and teachers. By removing the anonymity restriction, the best tutor for a given student could even call the student back as soon as they are available. Differentiation by providing the best tutor for student needs will contribute to a better, efficient, and effective service.

Moving away from people, another resource to consider includes technology. Each tutor should have a computer at his station. Another piece of MNPS Achieves includes

distributing refurbished computers to families that do not have them in the district. Perhaps, through a tighter partnership with MNPS, the district would consider supplying Homework Hotline with some of these computers as well. With technology in front of each tutor, it becomes possible to keep digital files on students, to look up teacher websites for specific on-time information, to access online learning options the students have, and many more functions. The tutors are presently very limited by the technology of mostly paper and pencils.

Related, we recommend that the executive director consider instructional technology beyond the computer itself. The first question a tutor should ask a student is "Do you have a computer with Internet access?" If the student answers affirmatively, then the tutor can provide a stronger tutoring experience. Instead of being limited to auditory tutoring, a multi-modal approach becomes possible. Tutors could employ use of blogs, email, wikis, Elluminate, Skype, and a host of other possibilities to tutor the students in a more interactive fashion.

Homework Hotline also puts its own resources into the prizes they give away to student callers. Based on student interviews, we do not believe this is a good use of the resources of Homework Hotline. Homework Hotline employees spend a lot of time getting the prizes, packaging them, determining where they go, and mailing them. We recommend they save these financial and time resources to put toward the other recommendations in this section.

Finally, space is a limited resource for Homework Hotline. Presently, they only have access to the building during weekdays and when the school system is open. This is not ideal for a tutoring agency. Specifically, weekend tutoring would be beneficial to the students, especially on Sundays when they are preparing for the week ahead. We recommend working with MNPS to find a way to gain access to the center beyond their current access.

INSTRUCTIONAL QUALITY

The executive director, like a school principal, should be the instructional leader of the organization. She should become proficient herself in best practices with regard to tutoring. She should ensure the tutors support the work of the teachers that are in the MNPS classrooms. She should make instructional quality by her tutors a top priority.

Part of being an instructional leader is ensuring a learning environment within Homework Hotline. Presently, tutors organically have discussions surrounding techniques/methods to help students who are stuck. The executive director should make intentional time for such discussions. The tutors can learn from one another as well as from those practices brought

in from MNPS trainings in the district as described elsewhere.

Another way to ensure instructional quality is through working with the MNPS teachers of their frequent callers. By discussing the specific needs of a middle school math student, the tutor can make notes in the student's Homework Hotline file and plan tutoring sessions with the benefit of context.

Homework Hotline tutors could benefit from developing relationships with frequent callers. If a student is always assigned to the same tutor, the tutor will be able to provide better services. Another approach worth considering is allowing students to establish phone appointments with specific tutors. Finally, if the assigned tutor is not available when the student calls, the tutor could call them back when they are next available.

While MNPS provides many textbooks and other resources to Homework Hotline, it is not exhaustive. First, through relationships established with partner middle schools, the tutors should be able to get complete materials for instructional purposes. Also, materials that are referred to as being absent, e.g. the Wordly Wise series, should be specifically requested from MNPS in addition to the textbooks already provided. Having such resources at the fingertips of tutors will help in their providing finer instructional quality.

As a part of MNPS Achieves, district leaders are developing new middle school math pacing guides that divide the scope and sequence of the curricula by nine-week increments. A purpose of this endeavor is to keep teachers in synch from middle school to middle school across the district. This will provide uniformity of math instruction. Homework Hotline should obtain these documents and use them to inform their work with students who call in for help. The tutors would have a better idea of what they have learned, what they are learning presently, and how to help prepare them for what is coming next. The executive director should obtain these online documents, train the tutors in their contents, and insist upon there use in tutoring the math students of middle schools in MNPS.

Finally, another issue being addressed by MNPS Achieves is that of increasing the passing rate by its students on the Tennessee Comprehensive Assessment Program (TCAP.) While not a discipline in education, this test represents an important gate keeping function for students as they move through the K-8 system. We recommend that the executive director look into ways to educate the tutors on how to work with students to prepare for this important test as well as to work with schools in identifying students at-risk of failing parts of this high-stakes test.

STUDENT OUTCOMES

In the most recent state of the school address, the MNPS superintendent said, "Differentiation is the key to helping our disadvantaged youth thrive." To help teachers accomplish this differentiation, he is making available to MNPS teachers a data warehouse on the students in the district. The teachers will now have quick access to student data that can drive instructional practice. Given that two-thirds of Homework Hotline employees are MNPS employees as well, 16 of the staff will already have access to this information. It is recommended that the executive director gain access to this database or be able to request information on specific students that are seeking help at Homework Hotline. Again, by having context and background information on the students, the tutors can provide more targeted and quality tutoring services.

The executive director should establish baseline data on frequent callers and then set target goals that represent improved student outcomes. Presently, the tutors work closely with 79 callers (calling eight or more times) out of about 1450 callers. Homework Hotline should set SMART (specific, measurable, attainable, realistic and timely) goals regarding desired number of frequent callers, how to best serve them, and how to measure successful tutoring experiences based on measurable standards. More specifically, they should develop sound assessment tests that determine student mastery of concepts rather than the informal methods currently in place. These assessments should be tied to practices utilized by MNPS so that meaningful information can be shared between Homework Hotline and the partner (or other) schools.

Homework Hotline should also work with MNPS schools to create a longitudinal study of effectiveness between partner middle schools and non-partner middle schools with similar demographics. Through such a study, Homework Hotline could better judge its effectiveness. Presently, there are not data available to determine whether or not the services provided are effective. Data should be gathered from multiple sources including students (frequent callers), test scores, teachers, tutors, counselors, etc.

Finally, Homework Hotline should create an integrated approach to its tutoring services with MNPS. By working closely with the school system, they can adopt strategic goals and practices for achieving those goals. This team approach will create a synergy that will benefit the students greater than the two working separately toward the same goals. Student outcomes will more likely show positive growth through partnering.

CONCLUSION

Homework Hotline has many positive characteristics already in place. They have a passionate executive director and caring tutors. They all have a strong desire to help the students that call into the center. That said, the organization has many opportunities to improve its services. By narrowing its mission, creating a strong marketing plan, investing in resources, improving instructional quality, focusing on student data/measurable student outcomes, and partnering closely with MNPS, Homework Hotline can achieve its full potential.

RECOMMENDATIONS FOR FUTURE STUDY

Presently, it is very difficult to determine if Homework Hotline is effective in helping student callers become successful in school. The students are all anonymous and there is no connection to student data at the school. By removing these constraints, Homework Hotline could create a study to determine its effectiveness in helping students learn and become more successful in school.

With regard to student access to computers and the Internet, there is a disconnect between what Homework Hotline believes and the employees interviewed in MNPS schools. The executive director firmly believes that the students do not have access in the majority of cases. The school personnel believe the students do have access in the majority of cases. It is recommended that Homework Hotline gather data to understand conclusively the reality of the lives of their callers with regard to technology access.

Homework Hotline could also design a longitudinal study comparing partner MNPS schools and non-partner MNPS schools. A mixed-methods study could give greater insight into the value of tutoring in addition to the value of working closely with the schools partnered with Homework Hotline. Partnering with a school district and adopting specific schools is a novel idea with regard to telephone tutoring services. It could prove to be a model for such services nationally.

Homework Hotline, post creation of a business and marketing plan, could study the effectiveness of its branding strategies. Do the schools understand their mission, services, and results? Does the greater community understand and support Homework Hotline? Is there an increase or shift in funding that supports the narrowed mission? Do students understand the availability and benefits of Homework Hotline?

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APPENDICES

APPENDIX 1

GRADUATION RATES

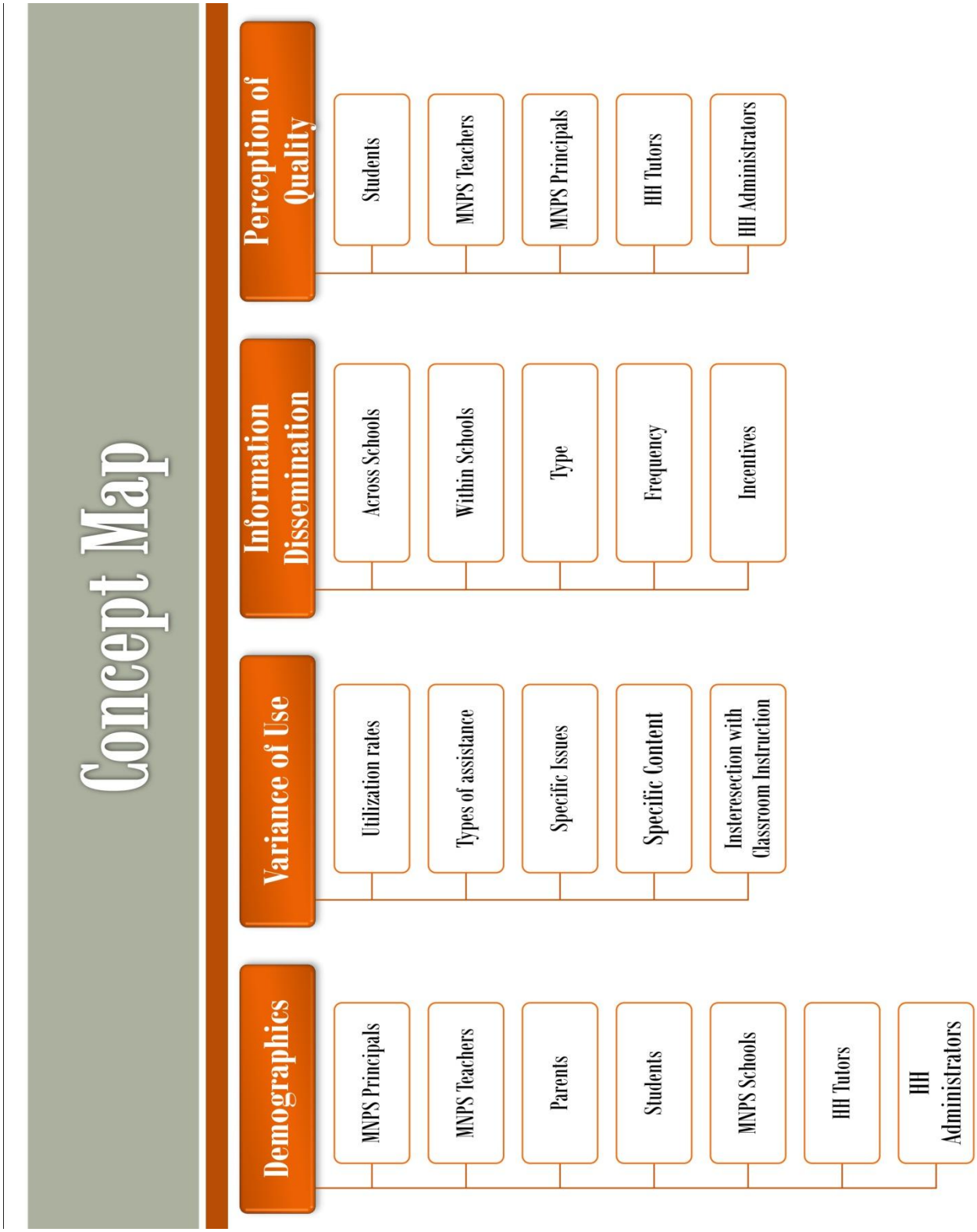
Educational Attainment by State (1990, 2000, 2007)

State	1990			2000			2007		
	High school graduate or more	Bachelor's degree or more	Advanced degree or more	High school graduate or more	Bachelor's degree or more	Advanced degree or more	High school graduate or more	Bachelor's degree or more	Advanced degree or more
United States	**75.2**	**20.3**	**7.2**	**80.4**	**24.4**	**8.9**	**84.5**	**27.5**	**10.1**
Alabama	66.9	15.7	5.5	75.3	19.0	6.9	80.4	21.4	8.0
Alaska	86.6	23.0	8.0	88.3	24.7	8.6	90.5	26.0	9.9
Arizona	78.7	20.3	7.0	81.0	23.5	8.4	83.5	25.3	9.2
Arkansas	66.3	13.3	4.5	75.3	16.7	5.7	81.1	19.3	6.5
California	76.2	23.4	8.1	76.8	26.6	9.5	80.2	29.5	10.5
Colorado	84.4	27.0	9.0	86.9	32.7	11.1	88.9	35.0	12.5
Connecticut	79.2	27.2	11.0	84.0	31.4	13.3	88.0	34.7	15.4
Delaware	77.5	21.4	7.7	82.6	25.0	9.4	87.4	26.1	10.4
District of Columbia	73.1	33.3	17.2	77.8	39.1	21.0	85.7	47.5	26.0
Florida	74.4	18.3	6.3	79.9	22.3	8.1	84.9	25.8	8.9
Georgia	70.9	19.3	6.4	78.6	24.3	8.3	82.9	27.1	9.5
Hawaii	80.1	22.9	7.1	84.6	26.2	8.4	89.4	29.2	9.9
Idaho	79.7	17.7	5.3	84.7	21.7	6.8	88.4	24.5	7.6
Illinois	76.2	21.0	7.5	81.4	26.1	9.5	85.7	29.5	11.0
Indiana	75.6	15.6	6.4	82.1	19.4	7.2	85.8	22.1	7.9
Iowa	80.1	16.9	5.2	86.1	21.2	6.5	89.6	24.3	7.5
Kansas	81.3	21.1	7.0	86.0	25.8	8.7	89.1	28.8	9.8
Kentucky	64.6	13.6	5.5	74.1	17.1	6.9	80.1	20.0	8.0
Louisiana	68.3	16.1	5.6	74.8	18.7	6.5	79.9	20.4	6.6
Maine	78.8	18.8	6.1	85.4	22.9	7.9	89.4	26.7	9.2
Maryland	78.4	26.5	10.9	83.8	31.4	13.4	87.4	35.2	15.7
Massachusetts	80.0	27.2	10.6	84.8	33.2	13.7	88.4	37.9	16.0
Michigan	76.8	17.4	6.4	83.4	21.8	8.1	87.4	24.7	9.5
Minnesota	82.4	21.8	6.3	87.9	27.4	8.3	91.0	31.0	10.0
Mississippi	64.3	14.7	5.1	72.9	16.9	5.8	78.5	18.9	6.4
Missouri	73.9	17.8	6.1	81.3	21.6	7.6	85.6	24.5	8.9
Montana	81.0	19.8	5.7	87.2	24.4	7.2	90.0	27.0	8.6
Nebraska	81.8	18.9	5.9	86.6	23.7	7.3	89.6	27.5	8.8
Nevada	78.8	15.3	5.2	80.7	18.2	6.1	83.7	21.8	7.5
New Hampshire	82.2	24.4	7.9	87.4	28.7	10.0	90.5	32.5	11.5
New Jersey	76.7	24.9	8.8	82.1	29.8	11.0	87.0	33.9	12.7
New Mexico	75.1	20.4	8.3	78.9	23.5	9.8	82.3	24.8	10.2
New York	74.8	23.1	9.9	79.1	27.4	11.8	84.1	31.7	13.5
North Carolina	70.0	17.4	5.4	78.1	22.5	7.2	83.0	25.6	8.6
North Dakota	76.7	18.1	4.5	83.9	22.0	5.5	89.0	25.7	6.4
Ohio	75.7	17.0	5.9	83.0	21.1	7.4	87.1	24.1	8.8
Oklahoma	74.6	17.8	6.0	80.6	20.3	6.8	84.8	22.8	7.6
Oregon	81.5	20.6	7.0	85.1	25.1	8.7	88.0	28.3	10.3
Pennsylvania	74.7	17.9	6.6	81.9	22.4	8.4	86.8	25.8	9.9
Rhode Island	72.0	21.3	7.8	78.0	25.6	9.7	83.0	29.8	11.8
South Carolina	**68.3**	**16.6**	**5.4**	**76.3**	**20.4**	**6.9**	**82.1**	**23.5**	**8.2**
South Dakota	77.1	17.2	4.9	84.6	21.5	6.0	88.2	25.0	7.0
Tennessee	67.1	16.0	5.4	75.9	19.6	6.8	81.4	21.8	7.6
Texas	72.1	20.3	6.5	75.7	23.2	7.6	79.1	25.2	8.2
Utah	85.1	22.3	6.8	87.7	26.1	8.3	90.2	28.7	9.1
Vermont	80.8	24.3	8.9	86.4	29.4	11.1	90.3	33.6	12.9
Virginia	75.2	24.5	9.1	81.5	29.5	11.6	85.9	33.6	13.7
Washington	83.8	22.9	7.0	87.1	27.7	9.3	89.3	30.3	10.8
West Virginia	66.0	12.3	4.8	75.2	14.8	5.9	81.2	17.3	6.6
Wisconsin	78.6	17.7	5.6	85.1	22.4	7.2	89.0	25.4	8.5
Wyoming	83.0	18.8	5.7	87.9	21.9	7.0	91.2	23.4	7.7

Source: U.S. Census Bureau, 1990 Census of Population, 2000 Census of Population, and 2007 American Community Survey.

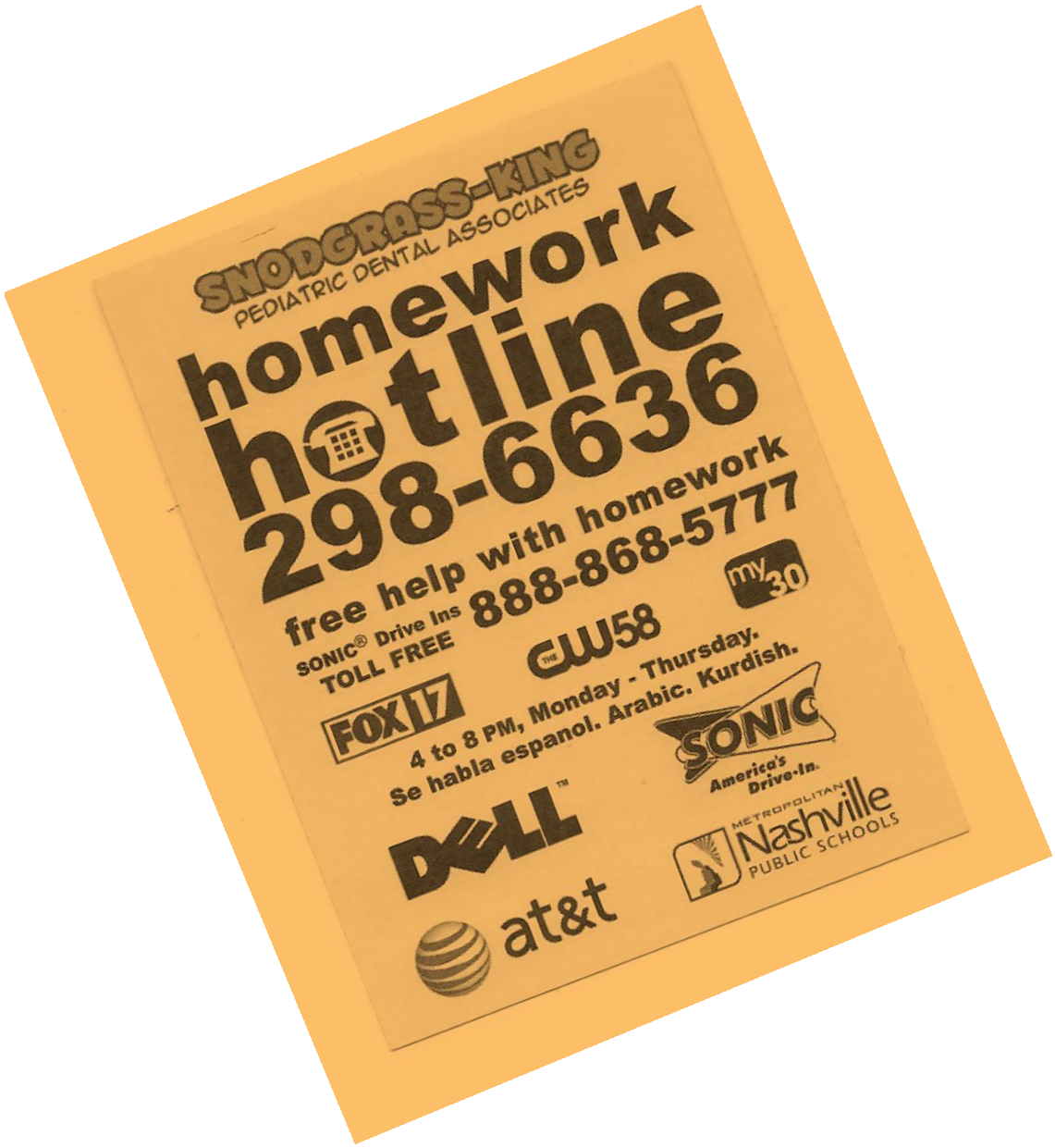
APPENDIX 2

CONCEPT MAP



APPENDIX 3

HOMEWORK HOTLINE STICKER



APPENDIX 4

PRIZE LETTER TO TEACHER

homeworkhotline

September 23, 2010

Cameron
Davidson

Dear ,

Your student, , asked a good question and won a prize.
Enclosed please find a from Homework Hotline.
Please pass it on with our congratulations.

We know that only motivated students from the most inspiring teachers call the Hotline. Thanks to you both.

Sincerely yours,

Wendy Kurland

APPENDIX 5

SCHOOL CONTRACT

Homework Hotline 2010-11 Checklist

For school year 2010-11, please return the enclosed checklist and contents by **July 1, 2010**.
Thank you. Homework Hotline looks forward to a great year working with your students.

_____ ATTACH list of all schools with: (This is needed to send stickers, posters, and other materials)

School name	Address
Phone and fax	Principal
Projected enrollment	Percentage receiving free or reduced lunch

_____ A thank-you letter to your sponsor (please send to Hotline). Sponsor: _____

_____ Homework Hotline contact for the 2010-11 school year:

_____
Name Title

_____
School System

_____
Mailing address (for stickers and premiums)

_____

_____
Phone Fax Email

_____ ATTACHED list of newly adopted books (please include title, publisher and edition).
(We may need your assistance in locating single copies of adopted textbooks in teacher edition. Books remain the property of your system but are located at the Hotline. If copies are not available, Hotline can contact publishers on your behalf to request free copies. School systems are not expected to purchase books for Hotline use.)

Textbook contact is _____ (name and email)

_____ Hotline likes to attend a principals' meeting at least once every three years. The presentation is under six minutes and explains how we work, what is available, and information we can provide to schools.

_____
Meeting Date Time Address # Attending Contact Phone

_____ A promise to encourage principals to use Hotline promotional materials. Stickers should be placed inside textbooks or in student planners.

_____ Your cooperation in telling people in our community about the Hotline. (Hotline can prepare releases for local media identified by your system.)

Local media: (Name, phone and email)

_____

_____

This contract was completed by:

_____ _____ _____
Name Title Date

APPENDIX 6

LETTER TO PRINCIPAL

August 16, 2010

Dear Principal,

The Metro Nashville Public Schools will again partner with the Homework Hotline to provide free tutoring to your students. I hope that you will encourage your teachers, parents, and students to use the service.

Each night, 14 teachers provide free one-on-one academic assistance by phone. Specialists, primarily MNPS teachers, are available for: math, reading, science, language arts, social studies, history, art, Spanish, and more.

Bilingual service is available in Spanish, Arabic, Kurdish, Turkmani, Creole and Swahili.

Hotline is open 4:00 - 8:00p.m, Monday through Thursday, beginning August 16.

Please distribute the enclosed stickers to your teachers and ask that they be placed inside the front cover of the math books or agendas. I would recommend against handing them directly to unsupervised children – they may end up on walls and floors.

If you need more stickers (to give to parents or to keep in the guidance office, for example) or would like posters for classrooms, please contact the Hotline: homeworkhotline@earthlink.net or call 298-6636 or 888 868 5777.

If you cannot distribute the stickers, they must be returned to Homework Hotline through in-school mail.

Sincerely,

Gary Cowan

APPENDIX 7

PREVIOUS INTAKE FORM, BLANK

Homework Hotline • Phone Log

HH STAFF: _____ **DATE:** _____ **TIME:** _____ **DURATION:** ____

Student: _____ Phone (if needed): _____

❒ **1ST TIME CALLER (help caller select code name)** ❒ **HAS CODE** ❒ **PARENT/ADULT**

CODE NAME: _____ **initials and last four digits of phone number**

GRADE: ❒ K ❒ 1 ❒ 2 ❒ 3 ❒ 4 ❒ 5 ❒ 6 ❒ 7 ❒ 8 ❒ 9 ❒ 10 ❒ 11 ❒ 12 ❒ College ❒ GED

LANGUAGE SPOKEN AT HOME _____

STAFF PERSON SPOKE: ❒ **English** ❒ **Spanish** ❒ **Kurdish** ❒ **Arabic** ❒ **other** _____

SCHOOL: _____ **COUNTY:** _____

SUBJECT: _____ Teacher: _____

Book: _____ Page: _____

TEACHERS, PLEASE MAKE AN EDUCATED GUESS AS TO THE REASON FOR THIS CALL:

❒ **Test prep/homework check** ❒ **Specific homework problem**

❒ **Unclear on entire concept** ❒ **Behind grade level in subject** ❒ **Other** _____

Notes:

❒ Prize winner (please remember to get teacher's name for all prize winners)

❒ Prize sent: ❒ teacher's pet ❒ math flash cards

❒ dictionary ❒ Spanish-English dictionary ❒ other _____

CALL RESOLVED? ❒ **YES** ❒ **NO**

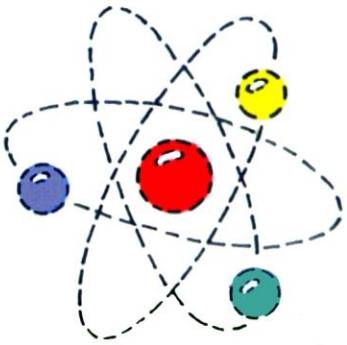
MASTERY OF CONCEPT? ❒ **YES** ❒ **NO** **If no, explain:**

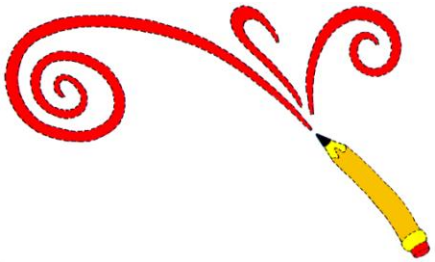
Please give name of any textbook requested but not available:

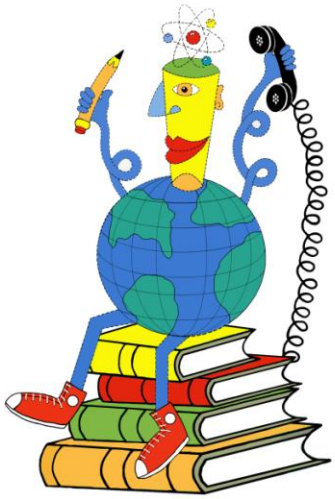
APPENDIX 8

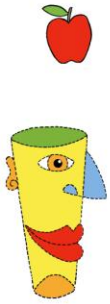
HOMEWORK HOTLINE LOGOS & SYMBOLS

homeworkhotline









APPENDIX 9

NEW INTAKE FORM

ADDED FOR PROJECT

Homework Hotline • Phone Log

HH STAFF: Inas A DATE: 10/28 TIME: 5:02 DURATION: 50 min

Student: _____ Phone (if needed): _____

☐ 1ST TIME CALLER (help caller select code name) ☑ REPEAT CALLER ☐ PARENT/ADULT

CODE NAME: ID 7753 First letter of first name & last four digits of phone: _____

GRADE: ☐ K ☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ College ☐ GED

LANGUAGE SPOKEN AT HOME English

STAFF PERSON SPOKE: ☑ English ☐ Spanish ☐ Kurdish ☐ Arabic ☐ other _____

SCHOOL: Kirkpatrick COUNTY: Dav.

SUBJECT: Math Teacher: _____

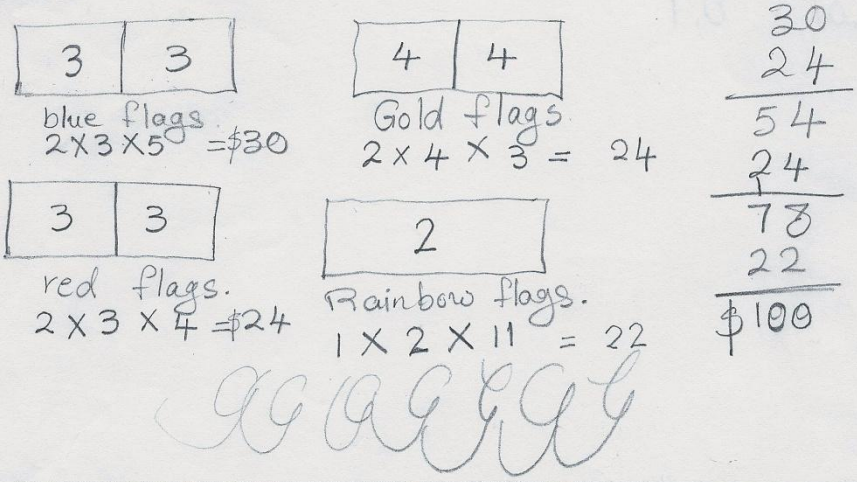
Book: Houghton Mifflin Page: 101

Teachers, please make an educated guess as to the reason for this call:

☐ Test prep/homework check ☑ Specific homework problem

☐ Unclear on entire concept ☐ Behind grade level in subject ☐ Other _____

Notes:



☐ Prize winner (please remember to get teacher's name for all prize winners)

☐ Prize sent: ☐ teacher's pet ☐ math flash cards

☐ dictionary ☐ Spanish-English dictionary ☐ other _____

CALL RESOLVED? ☑ YES ☐ NO

STUDENT SHOWED MASTERY OF CONCEPT? ☑ YES ☐ NO

Was not resolved because (please give name of any textbook requested but not available):

APPENDIX 10

INTERVIEW PROTOCOL - TEACHER

Teacher Protocol

1. Icebreaker question: Tell me about yourself. What made you want to become a teacher?
2. How does Homework Hotline work?
3. What information have you received about Homework Hotline?
4. How was the information given to you?
5. How would you prefer to receive the information?
6. How many times a year should HH promote itself with teachers? With students?
7. What is the best way for HH to promote itself with teachers? With students?
8. Describe the HH information that is currently available in your classroom. In your school.
9. Have you received HH stickers? If so, what did you do with them?
10. Approximately what percent of your students have a HH sticker on their notebook or folder?
11. Describe the incentives that HH offers. Please comment on the frequency of incentives, most desirable incentives, least desirable incentives, and your opinion on the incentive programs.
12. Do your students ever mention that they have called HH?
13. What do your students say about HH?
14. Do your students ever talk about problems getting through to HH?
15. What are your students' responses to the HH promotional materials?
16. Approximately what percentage of your students do you think call HH? What do you base this on?
17. Why do you think students from some schools use HH a lot while other schools have few students who use HH?

18. Describe the help students receive at HH.

    Is this help effective? Why or why not?

19. Do you feel that tutorial assistance through a call in hotline is effective? Why or why not?

20. How could HH better serve your students?

21. Please give examples of ways HH support your classroom instruction?

    How could this be improved?

22. What other options are available to your students to get extra help?

    How do these compare in frequency of use? In effectiveness?

23. What are your perceptions of HH?

24. What are your suggestions for HH?

25. How many years have you been teaching?
    a. How many years teaching this subject area?
    b. How many years teaching in this school? Years with MNPS?

26. Do you tutor for HH? Do you tutor for any other organization?

APPENDIX 11

INTERVIEW PROTOCOL – MNPS ADMINISTRATOR

Administrator Protocol

1. Icebreaker question: Tell me about yourself.

   What made you want to become an administrator?

2. What is Homework Hotline (HH)?

3. How does HH work?

4. What information have you received about Homework Hotline?

5. How was the information given to you?

6. How would you prefer to receive the information?

7. How many times a year should HH promote itself with teachers?

   With students?

8. What is the best way for HH to promote itself with teachers?

   With students?

9. How is information about HH promoted within your school?

10. Why do you think students from some schools use HH a lot while other schools have few students who use HH?

11. Have you received HH stickers? If so, what did you do with them?

12. Describe the incentives that HH offers. Please comment on the frequency of incentives, most desirable incentives, least desirable incentives, and your opinion on the incentive programs.

13. What are your perceptions of HH?

14. How do your teachers feel about HH?

APPENDIX 11, CONTINUED
INTERVIEW PROTOCOL – MNPS ADMINISTRATOR

15. What are the strengths of HH?

16. What suggestions for improvement do you have for HH?

17. How long have you been an administrator? At this school?

18. How many years have you been in education?

19. Years with MNPS?

APPENDIX 12

INTERVIEW PROTOCOL – SCHOOL COUNSELOR

School Counselor Protocol

1. Icebreaker question: Tell me about yourself. What made you want to become a counselor?
2. What is Homework Hotline (HH)?
3. How does HH work?
4. What information have you received about Homework Hotline?
5. How was the information given to you?
6. How would you prefer to receive the information?
7. How many times a year should HH promote itself with teachers?

   With students? With counselors?
8. What is the best way for HH to promote itself with teachers?

   With students? With counselors?
9. How is information about HH promoted within your school?
10. Have you received HH stickers? If so, what did you do with them?
11. Why do you think students from some schools use HH a lot while other schools have few students who use HH?
12. Describe the incentives that HH offers.

    Please comment on the frequency of incentives, most desirable incentives, least desirable incentives, and your opinion on the incentive programs.
13. What are your perceptions of HH?
14. How do the teachers feel about HH? The students?
15. What are the strengths of HH?

APPENDIX 12, CONTINUED
INTERVIEW PROTOCOL – SCHOOL COUNSELOR

16. What suggestions for improvement do you have for HH?

17. How long have you been a school counselor? At this school?

18. How many years have you been in education? Years with MNPS?

APPENDIX 13
INTERVIEW PROTOCOL – STUDENT

Student Protocol

1. Icebreaker Question: Tell me about yourself.

   What is your favorite thing to do outside of class?

2. For which subject do you usually call Homework Hotline (HH)?
   Which other subjects have you called about?

3. Why did you choose to seek help from HH?

4. How did you learn about HH?

5. Does anyone ever tell you to call HH?

6. How often do you call HH?

7. How long do you usually stay on the phone for HH tutoring?

8. How many times do you usually have to call before you are able to get through?

9. What is the best time to call HH?

10. Have you ever been unable to get through to HH? What did you do?

11. Other than HH, who else or where else do you get help with homework?

12. Do you attend any after school tutoring programs? Which ones?

13. How knowledgeable are the HH tutors in answering your questions?

14. How effective are the HH tutors when they try to help you?

15. Has HH affected your grades? How? Or Why not?

16. What sort of incentives does HH offer?

17. Have you tried to earn an incentive?

Appendix 13, Continued
Interview Protocol – Student

18. Have you ever received any incentive?

19. Which incentives offered do you like best and which do you like least?

20. What is the best part about HH?

21. What could HH do to make their program better?

22. What grade are you in?

23. Which school do you attend?

24. How long have you gone to school in MNPS?

APPENDIX 14
INTERVIEW PROTOCOL – TUTOR

Tutor Protocol

1. Icebreaker question: Tell me about yourself.
   What do you like to do when you are not teaching or tutoring?
2. Why did you decide to you work at HH?
3. How do you believe incentives influence call volume and content?
4. What do you like best about working at HH?
5. What do you like least about working at HH?
6. How could HH be improved?
7. How are HH promotional materials distributed?
8. What teaching strategies do you use over the phone?
9. What challenges to tutoring result from using a telephone?
10. How does your tutoring support the teaching going on in the child's classroom?
11. How could this be improved?
12. What resources do you have available for tutoring?
13. What would be useful additions?
14. Describe the pre and post assessment used.
15. Are these useful? How could they be improved?
16. Which subject(s) do you tutor?

Appendix 14, Continued
Interview Protocol – Tutor

17. Which night and shift do you work?

18. Approximately how many calls do you answer per night?

19. Are you a certified teacher? If so, in what areas are you certified?

20. How many years have you been teaching including this year?

21. What have you taught?

22. How many years have you worked at HH?

APPENDIX 15

INTERVIEW PROTOCOL –

HOMEWORK HOTLINE ADMINISTRATOR

Homework Hotline Administrator Protocol

1. Icebreaker question: Tell me about yourself. What do you do for fun outside of the HH?

2. What is Homework Hotline (HH)?

3. What information have you distributed about Homework Hotline?

4. How was the information distributed?

5. How would you prefer to deliver the information?

6. How many times a year should HH be promoted with schools?

   Counselors? Teachers? With students?

7. What is the best way for HH to promote itself with schools?
   Counselors? Teachers? With students?

8. How is information about HH promoted in the four target schools?

9. Have they received HH stickers?

10. Describe the incentives that HH offers.

11. Please comment on the frequency of incentives, most desirable incentives, least desirable incentives, and your opinion on the incentive programs.

12. What are your perceptions of HH?

Appendix 15, Continued

Interview Protocol – Homework Hotline Administrator

Strengths? Weaknesses?

13. How do your tutors feel about HH?

14. What suggestions for improvement do you have for HH?

15. How do you financially support HH? How are you held accountable to the funders?

16. How long have you been an administrator for HH? What is your background before coming to HH?

APPENDIX 16

HOMEWORK HOTLINE ANNUAL REPORT 2009-2010

Homework Hotline - Annual Report 09-10

Then and Now

Homework Hotline has grown and evolved.

	1990-91	09-10
Calls per year	5,581	24,118
Languages spoken	1	6
ELL calls	0	6,979
Average call length	7 min	23 min
African American history calendars	0	22,090
Dictionaries	0	500
Free school supplies	0	624 students
Community funding	$30,000	$155,395
Hours open per week	14 hours	20 hours
Teachers/phone lines per night	4	15

Calls 2009-10 ..... **24,118**

Fox17, MyTV30, CW58 air time **$210,500**

2009-10 Calls

Cheatham	407
Nashville/Davidson	15,791
Dickson	379
Maury	148
Clarksville/Montgomery (Ft. Campbell)	378
Robertson	515
Rutherford	2,493
Sumner	575
Williamson	917
Wilson	690
Wilson - Lebanon Special	345
Other	1,480

Calls by Grade 09-10

K-2	644
3	1,497
4	4,323
5	4,766
6	4,529
7	2,886
8	1,998
9	1,104
10	845
11	897
12	427
GED	42
Other/Unspecified	160

Funding

Sponsors	**$90,000**
Corps. & Foundations	**27,000**
School systems	**83,000**
Individuals	**31,534**
Other	**800**
In-kind	**132,000**
(SInclair Broadcasting, others)	

Direct governmental funding - $0
School system funding <25%

Calls by Subject

Foreign Languages	142
Language Arts/Reading/Spelling	4,030
Math	15,681
K-8 Math	12,306
Pre-Algebra	364
Algebra 1	1,597
Algebra 2	559
Geometry	462
Pre-Cal/Trig	292
Calculus	89
Statistics/other	12
Science	2,510
K-8 Science	1,995
Physical Science	57
Biology	96
Chemistry	232
Physics	113
Other	17
Social Studies/Geography	1,575
Other	180

Unduplicated callers 6,538

Average Call Length ..... 23 minutes

Hours of Tutoring .... 7,700 hours

Resolution Rate 93%

(Student reported successfully completing assignment.)

Mastery Rate **83%**

(Student independently worked a sample problem.)

Bilingual calls and ELL Calls

Hotline provides bilingual tutoring in six languages and ELL services in many others. 6,979 calls have been taken from students needing special or bilingual assistance.

Arabic	3,509
Kurdish	442
Spanish	1,223

One in five calls to the Hotline is from a child with a home language other than English.

Appendix 16, Continued

Homework Hotline Annual Report 2009-2010

Volunteers

AEP - Vanderbilt chapter H
Amanda Adams
Kia Armstrong
Ce'Dra Bowen-Jackson
Marissa Chandler H
Hui Cheng
Victoria Cohen-Crumpton H
Sina Daraei H
Dell Volunteer Group H
Feiran Hao H
Wayne Holt
Donovan Jordan HH
Leonard Jordan HH
Tariq Lacen
Hannah Park H
Cezanne Pope
Harsh Prema
Mukti Prema
Cody Simons H
White's Creek High Developing Community Leaders H

H 50-99 hours
H 100 hours or more
H Hotline Board Member

Our Mission

Homework Hotline provides one-on-one free tutoring by phone to Tennessee students and parents. With Homework Hotline, students tackle new concepts, complete challenging assignments, and gain academic skills.

Homework Hotline helps students achieve and thrive - one assignment at a time. Students who get the help they seek return to school better prepared and less discouraged.

Since 1990, Hotline teachers and volunteers have answered more than 400,000 calls.

Bilingual assistance is available in English, Arabic, Kurdish, Spanish, Swahili & Turkmani.

It's all free - thanks to Dell, AT&T, Metro Schools, Sonic Drive Ins, Scarlett Foundation, Snodgrass King Pediatric Dentistry, and MyTV 30/CW 58/Fox 17.

FOX 17 THE CW 58 my 30

DELL

SONIC America's Drive-in

SNODGRASS-KING PEDIATRIC DENTAL ASSOCIATES

at&t

SCARLETT FAMILY FOUNDATION

METROPOLITAN Nashville PUBLIC SCHOOLS

United Way

Thanks also to:
United Way of Dickson County
United Way of Wilson County

Homework Hotline
4805 Park Avenue
Nashville, TN 37209
(615) 298-6636
homeworkhotline@earthlink.net
www.homeworkhotline.info
Sonic toll free: 888 868-5777

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Fox17, MyTV 30, CW 58

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Peabody College of Vanderbilt Univ.

Appendix 17

Homework Hotline Previous Measures and Assessments

Homework Hotline Measurements and Assessment – 2009 -10

Goals

Homework Hotline students are given help to problem-solve, discover new resources, and practice academic skills.

Achievements in 2009-10

1. 24,118 sessions of one-on-one tutor to 6,538 unduplicated children and parents.
2. An average call is 23 minutes long.
3. 93% of Hotline callers rated their problem as "resolved" at the end of a call. This means the student has the correct answer and has finished the questions.
4. By the completion of the call, 83% of callers gained and proved mastery of the topic by finishing the assignment and successfully working a similar question independently.
5. 29% (6,979) needed bilingual of ELL support.
6. 8% (2,001) of calls come from parents or other adults, or students and parents together.
7. Homework Hotline works to capacity nearly every night of the year with thousands more who receive only a busy signal. Students need and want help to succeed in school.

Instruments

Every call begins with a brief assessment to determine skill at onset of the call (specific homework problem, unclear on entire concept, below grade level, etc.). Every call ends with a student being asked to work the next problem independently as the teacher listens. Then the teacher can assess and collect information on resolution and mastery.

Information on all calls is entered into a database that creates longitudinal reports, based on code names, that indicate whether students become repeat callers, how students improve over time, and what subjects students call about most often. Summaries are used internally to plan staff, language, and training needs. The summaries are shared externally to allow principals, Title I coordinators, and school districts to track trends and needs in their community. Reports can be generated based on the following data:

- grade
- district
- Hotline tutor for call
- frequency of Hotline use
- subject
- date and time
- language spoken at home
- skill at onset (-3 to 0)
- school
- duration of call
- language used for call
- skill at completion (0 to 2)
- Free or reduced lunch participation at student's school (indicator of low income).
- NCIB and other status reports of school

APPENDIX 18

HOMEWORK HOTLINE SPONSORSHIP LETTER

homeworkhotline

FOX 17 THE CW 58 my 30

Homework Hotline Sponsorship

The 2008 Cone Cause Evolution Study found that consumers are both more aware of and more receptive to cause-related messages than ever before, and they will reward socially conscious companies both with money and goodwill if they feel they are supporting a good cause.

- Nearly NINE IN 10 AMERICANS (89%) say it is important that business, government and nonprofits collaborate to solve pressing social and environmental issues.75% of consumers say it is important to be offered a range of ways outside of just purchasing a product to support issues they care about.
- 85% have a more positive image of a company when it supports a cause they care about.
- 79% say they would be likely to switch from one brand to another, when price and quality are similar, if the other brand is associated with a good cause.
- More than half (52%) of Americans think companies should maintain their level of financial support for causes during tough economic times, while another quarter (26%) expect companies to give more.

How does my company benefit?

- Corporate logo and audio branding on television spots on **Fox17, CW 58, & MyTV30** with $50,000 in **confirmed minimum broadcasts**. The 2006 and 2007 confirmed totals exceeded $175,000. The current total tops $200,000 for 2009-10.
- Corporate logo on **350,000** day-glow stickers inside textbooks or planners in 30 counties: Davidson/Nashville, Bedford, Cannon, Carroll, Cheatham, Clarksville/ Montgomery, Coffee, Dekalb, Dickson, Franklin, Giles, Henry, Hickman, Humphreys, Lawrence, Lewis, Macon, Marshall, Maury, Overton, Perry, Robertson, Rutherford, Smith, Trousdale, Warren, White, Williamson, and Wilson counties.
- Corporate name or logo on a new series of posters distributed to 591 schools, dozens of libraries, community centers, and other locations.
- Corporate logo on Hotline stationary, newsletters, and all other printed material. Mention in all press releases.
- Customized reports on Hotline calls by subject, county, school, grade and date
- Link and logos on www.homeworkhotline.info. The new site has averaged more than 1,500 unique visitors per month generating more than 200,000 hits per year.

How do I become a sponsor?

The Homework Hotline is a 501 (c) (3) nonprofit organization. Sponsors make a tax deductible, multi-year contribution of **$15,000** or more.

4805 Park Avenue Nashville, TN 37209 ☎ 615.298.6636 615.298.8087 fax ☎ 888.868.5777 ✉ homeworkhotline@earthlink.net

APPENDIX 19

INSTRUCTION SHEET FOR OBTAINING TEXTBOOKS

Textbooks

Homework Hotline makes every effort to inventory all currently adopted, and last adopted, textbooks for each partnership county.

How to get textbooks
Contact the textbook coordinator or system representative for each school system each summer. Make sure they remember to provide the Hotline with all new adoptions. Get Teacher's Editions, full kits (if science), and worksheets. Plan to pick up the books, since most systems do not have the budget to ship them.

MNPS requires a written request. Forms are in the filing cabinet. MNPS will deliver to Cohn. Curry Corder, MNPS's textbook coordinator, sends a complete list of new adoptions each spring and will help create the order.

Textbook coordinators

Cheatham	Kathy Adams, textbooks	792-2551
Davidson	Curry Corder, textbooks	291-6034
Dickson	Ernestine Adams, asst. director of schools	446-7571
Robertson	Catherine Clark - textbook services	384-0238
Rutherford	Kim Day - curriculum specialist	893-5812 x 22086
Williamson	Nannie Curry, textbooks	472 4078 or 472-4077
Wilson	JoAnne Harrell, elementary coordinator	444-3282

When the books are not available from the counties, try the local sales reps. Do not offer to pay - they should provide free books.

Holt, Reinhardt Winston	Phil Hester	591 5278
Glencoe	Ann Roark	256 3542 or 394 5140
McGraw Hill	Tennessee Book Company	800 456 0418

Inventorying the books
All books remain the property of the school system that provided them. Books are entered into the "Books on Inventory" database. (See "Using the Books of Inventory Database")

APPENDIX 20

NASHVILLE TUTORING AGENCIES

Here are some Nashville agencies that provide free or sliding scale tutoring.

Backfield in Motion (615) 227-9935

Bethlehem Center – 329-3386

Bordeaux Northwest Family Resource Center - 291-6355 x 104

Boys and Girls Clubs (615) 833 2368, three sites

Catholic Charities - 615-259-3567

CWA-Cayce Learning Center (615) 2484029

Charles Davis Foundation (615) 843-5841

Edgehill Community Center - 256 5108

Friendship Community Outreach - 329 1467

INROADS (615) 255-7397

Martha O'Bryan Center – 254-1791

Moves and Grooves Inc - 554 1809

Nashville Public Libraries, some sites and online

One Hundred Black Men of Middle Tennessee (615) 248-2721

Project for Neighborhood Aftercare - 615-385-7067

Reach One Teach One (615) 227-3318

Salvation Army (615) 242-0411, many sites

Somalian Community Center

St Luke's Community House – 350-7893

Urban League (615) 254 0525

Woodbine Community Organization (615) 833-9580

YMCA: (615) 254 0631, many sites

Youth Encouragement Centers (615) 315-5333

APPENDIX 21

CAPSTONE PROJECT DESCRIPTION

Vanderbilt Capstone Project - Request for Assistance
Wendy Kurland, director, Homework Hotline

homeworkhotline

Homework Hotline is an afterschool intervention that provides free one-on-one tutoring by phone to struggling students in Middle Tennessee. The mission is to assist students as they tackle new concepts, complete challenging assignments, and gain academic skills.

Homework Hotline helps students achieve and thrive - one assignment at a time. Students who get the help they seek return to school better prepared and less discouraged.

The staff of certified teachers provides more than 8,000 hours of tutoring each year to at least 6,500 unduplicated students (25,000 sessions of 20 minutes each). Working in partnership with 30 Middle Tennessee school districts – both rural and urban - Hotline offers tutoring in six languages and is the largest free tutoring program in Tennessee.

Current assessment tools
Homework Hotline assesses educational progress and program outcomes in two ways.

1. Objective statistical collection
   Hotline calls are logged and entered into a database. This allows for summarizing calls by poverty level, grade, school district, subject, home language, duration, and other fields.

2. Individual session accomplishments
   Each caller is given a codename, tagged to each call, allowing for anonymous tracking of usage.

   Calls contain brief pre- and post-testing with intake and completion levels given numerical values. This allows an overview of a student's annual usage, as well as a snapshot of the achievement level of the program.

Hotline assessment goals
Hotline needs to know if completion of the assignment and proven mastery of the concept translates to better outcomes in the classroom. Do students who use the Hotline do measurably better in school?

Gaps in the literature
There are a number of large hotline services in the US but none that we have located have completed any type of rigorous assessment. The largest programs, Dial-A-Teacher in NY and Ask Rose in Indiana, have single funders and are not research-based. A study of this sort would be of interest to all municipalities that fund these programs or are considering adding one, have national ramifications on the value of tutoring, and assist non-profits in program improvement and service provision.

Appendix 21, Continued

Capstone Project Description

A Capstone Project

A Capstone project is vital to help Hotline better help children. Needed are:

1. A better review of the literature on tutoring, on-line tutoring, and phone-based service.
2. A methodology for data collection in the schools.
3. A methodology for better data collection during service provision, and a framework for future data collection.
4. A methodology for assessing captured data.

Essential questions

1. What effect does an after school intervention like homework hotline have on individual and group student achievement? (How are we doing?)
2. What lessons can be learned from qualitative data assessment to improve the current services and inform future implementation strategies at Hotline? (Are we efficiently and effectively using the resources towards our stated goals?)

Resources available

1. A willingness of the part of the school district to cooperate with a study
2. A large amount of data including: a multi-year database of calls, phone logs, codenames, and other materials.

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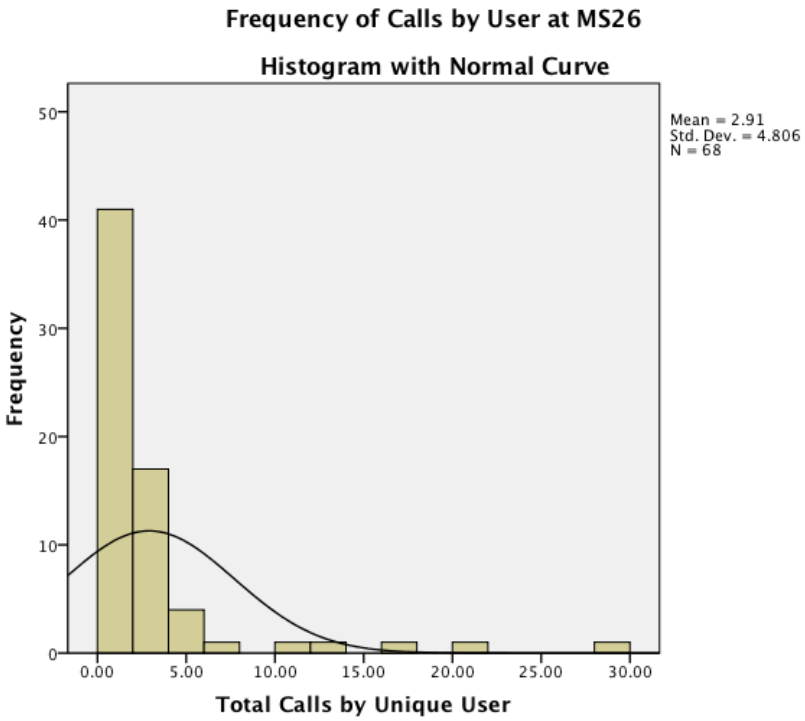
Homework Hotline
4805 Park Avenue • Nashville, TN 37209
(615) 298-6636 – Hotline (615) 423-3989 – summer
www.homework hotline.info homeworkhotline@earthlink.net

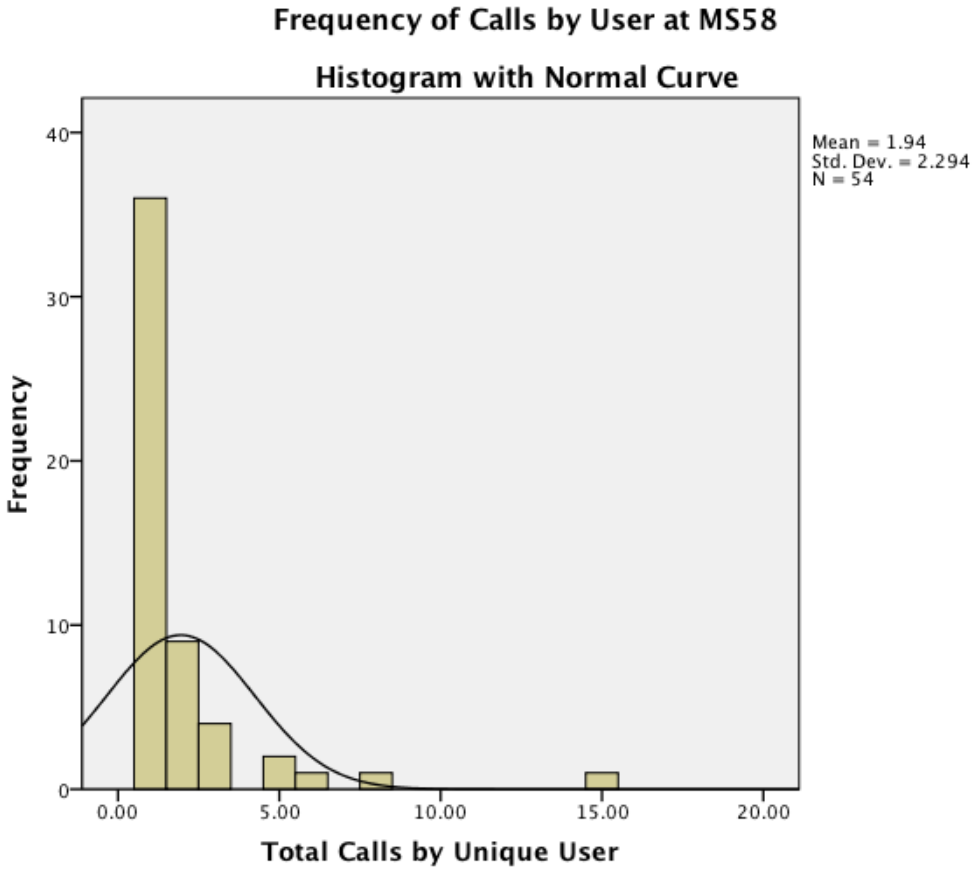
Appendix 22

Quantitative Data Description



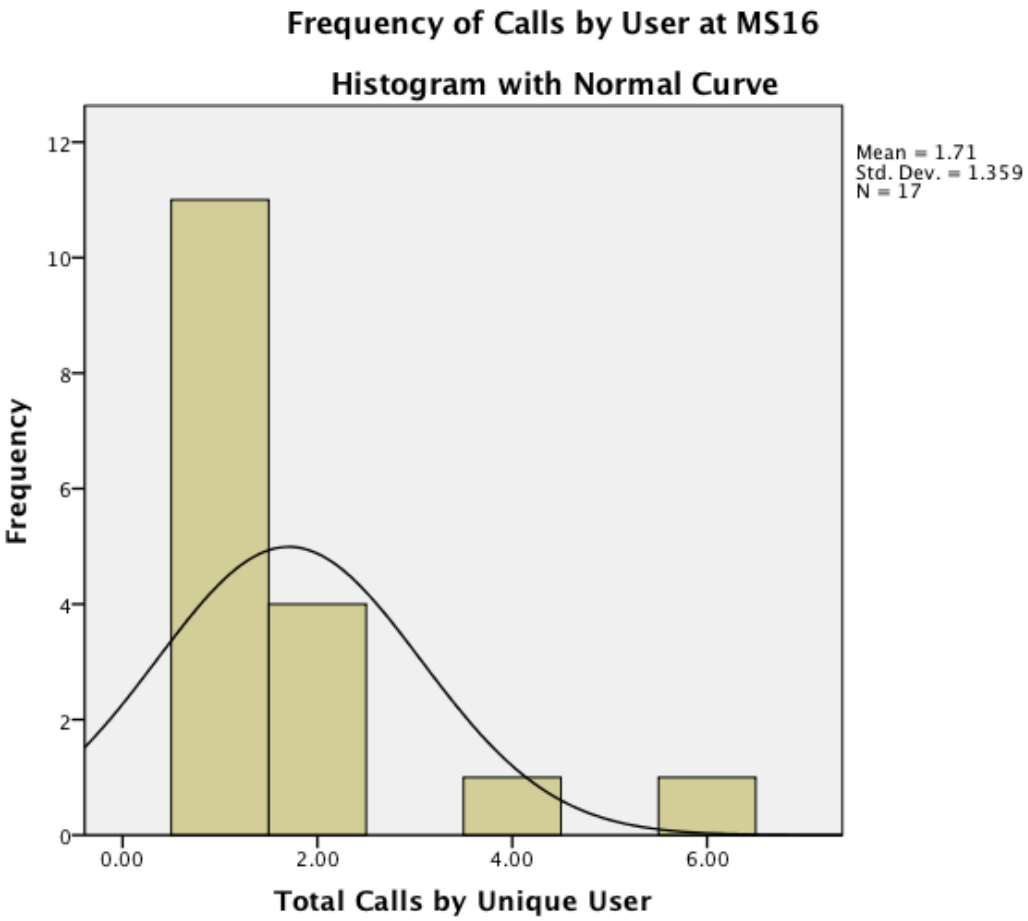
Data Collected from Homework Hotline August 2010–November 2010

Descriptive Data for Nashville Middle School	
Mean	2.9
Median	1
Mode	1
Range	28
Standard Deviation	4.8
Total Calls	196
Total Callers	68



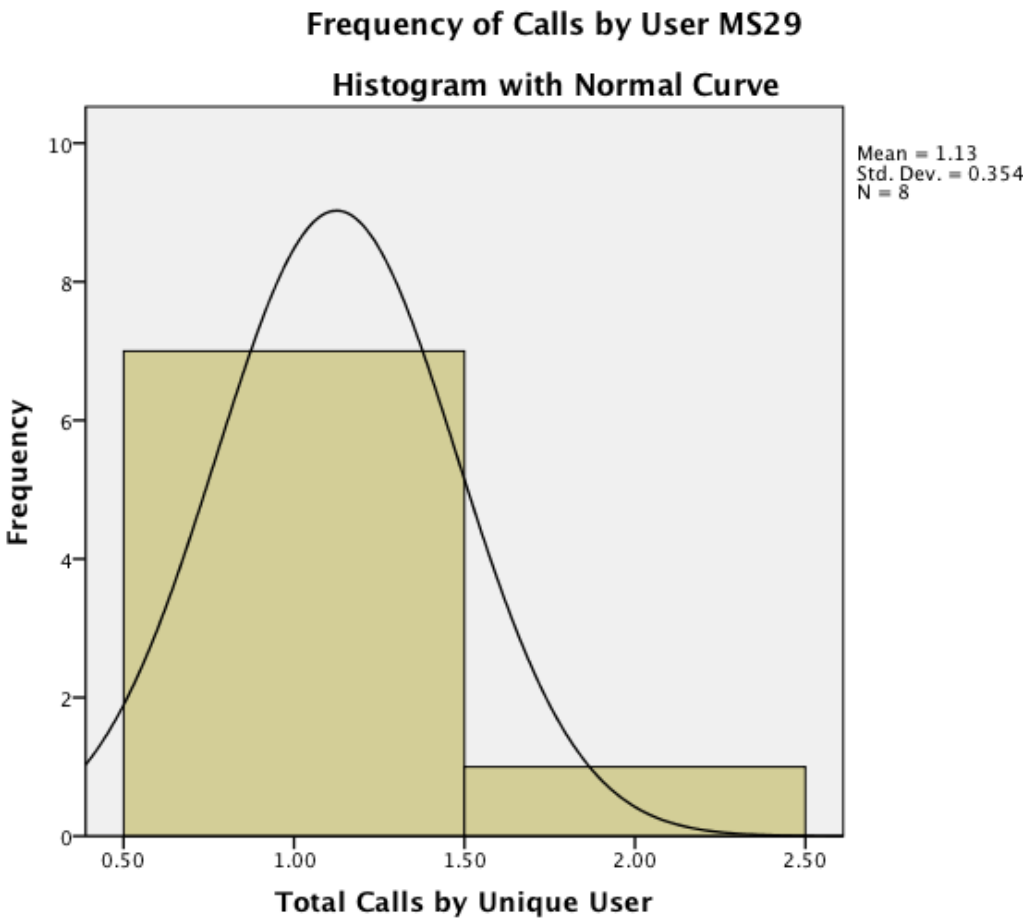
Data Collected from Homework Hotline August 2010–November 2010

Descriptive Data for Williamson Middle School	
Mean	1.9
Median	1
Mode	1
Range	28
Standard Deviation	2.3
Total Calls	104
Total Callers	54



Data Collected from Homework Hotline August 2010–November 2010

Descriptive Data for Davidson Middle School	
Mean	1.7
Median	1
Mode	1
Range	5
Standard Deviation	1.4
Total Calls	28
Total Callers	17



Data Collected from Homework Hotline August 2010–November 2010

Descriptive Data for Tennessee Middle School	
Mean	1.1
Median	1
Mode	1
Range	1
Standard Deviation	0.4
Total Calls	9
Total Callers	8

APPENDIX 23

PICTURES OF

HOMEWORK HOTLINE.

TAKEN NOVEMBER 11, 2010.

Appendix 23, Continued

Pictures of

Homework Hotline.

Taken November 11, 2010.

Appendix 23, Continued

Pictures of

Homework Hotline.

Taken November 11, 2010.

Appendix 23, Continued

Pictures of

Homework Hotline.

Taken November 11, 2010.