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Homework Hotlines: Recommendations for Successful Practice

It is common for students to have difficulty completing homework in a timely and accurate manner. Many school districts and organizations offer homework hotlines to help students complete assignments. However, educators lack a clear description of what is necessary to establish and maintain an effective hotline. This article addresses four issues that need to be considered: (a) a definition of homework hotlines and some of their variations; (b) how the need for a hotline should be assessed; (c) a review of the literature on important considerations in developing a homework hotline; and (d) a look at past research on the effectiveness of hotlines and how they should be evaluated in the future. Throughout, the authors make recommendations based on current research and practices.

PARENTS FREQUENTLY REPORT that their children have difficulty with homework. Most students state that they sometimes require help, and this need is greatest among youth aged 4-14 years old (Community and Urban Affairs, 1991). Compounding these

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concerns is the inability of some parents to provide help with homework. Parents may find that they are not comfortable serving as tutors or may not have access to resources that would help them provide assistance. Indeed, a majority of parents report that they sometimes have trouble understanding their children's assignments and would benefit from additional clarification or outside help (Community and Urban Affairs, 1991). Getting help with homework is often made worse because 69% of students from two-parent families and 85% from single-parent families return to homes where all adults have outside jobs (U.S. Bureau of Labor Statistics, 2000). Furthermore, the availability of at-home resources (e.g., study desk, reference materials) varies among families, making it difficult for educators to predict whether students have access to study aids and quality study environments. Finally, most students report completing their homework at locations where it may be difficult to obtain adult help (e.g., library).

Because of these conditions, many schools and communities have initiated homework hotlines to provide students with after-school assistance (U.S. Department of Education Office of Policy and Planning, 1993). Generally, these hotlines offer help during a time of day when students are most likely to be completing assignments. Although use of these hotlines is well-established in some communities, the programs are not available universally.

Further, characteristics vary across programs, and what makes for a good hotline may be different for different communities. Organizations and schools that want to initiate a homework hotline lack information on what to consider in planning and what kinds of programs have been most successful in the past.

In this article, we address four issues that need to be considered when initiating and maintaining a hotline. First, we provide a definition of homework hotlines and discuss some of their variations. Second, we examine how the need for a hotline should be assessed. We then review the literature on important considerations in developing a homework hotline. Finally, we look at past research on the effectiveness of hotlines and how they should be evaluated in the future. Throughout, we make recommendations based on current research and practices.

What Are Homework Hotlines?

Although not specifically a homework hotline, the first recorded instance of a telephone-based assistance program occurred in 1897 when the Boston Public Library installed a telephone line that was used by callers to obtain information. The library also utilized a clerk who would go to other libraries to obtain information when it was not available locally (Solomon, 1991). Variants on this system evolved into the contemporary homework hotline.

From their inception, homework hotlines have provided students with additional, after-school assistance in learning classroom concepts and completing assignments. According to Cooper (2001), homework hotlines are "telephone services in which teachers or other knowledgeable people are available to answer questions related to homework problems" (p. 48). Such programs allow students to obtain suitable assistance if they lack the skills or resources to complete assignments outside of school. Homework hotlines may not, however, be prepared to address problems related to students being assigned too much work or students who are receiving work that is too advanced for them (i.e., they lack the necessary foundation for completing current assignments). Later we will suggest a way teachers can use hotlines to help them determine whether assigned homework is at an appropriate level for their students.

The term *homework hotline* is often used to refer not only to those systems that provide live tutoring for assignments, but also automated services providing feedback and information regarding assignments. For instance, the latter type might allow a parent or student who is unaware of the current assignment to dial a number to connect to a prerecorded message from a specific teacher that describes the daily assignment. The automated system may also provide other school or classroom news. The content of an automated system may be either general (i.e., directed towards an entire school and/or classroom) or specific to the individual student. If student-specific, it might consist of individually recorded messages that provide information for the parents on whether their child's previous assignment had been completed, what the current assignment is, and additional phone numbers for help or clarification (Garner, 1991). In contrast with live tutoring hotlines, these automated systems are generally available 24 hours a day (Glazer & Williams, 2001).

Other mechanisms for providing homework help include (a) answering machine systems that allow students to call, leave a number, and have their call returned when convenient for the tutor; (b) internet resources (e.g., chat rooms, bulletin boards, e-mail) that allow students to present questions and receive answers; and (c) educational television programming that incorporates on-air calls (Sang, 1986). In particular, students' increased use of computers and the Internet suggests the potential of this resource for connecting students with homework help (Lenhard, Simon, & Graziano, 2001). Many students already use the computer to prepare homework assignments or obtain academic information from websites. The provision of live homework help through Internet connections would be a logical extension and use for this resource.

Although all types of homework hotlines provide students and parents with assistance, the focus of this article is on those hotlines that primarily offer students live assistance with the completion of specific homework assignments. We do not discuss systems that provide general tutoring or offer only general information on homework assignments (e.g., what pages to read for class). Services that are not telephone-based (e.g., computer-based) are

addressed only when they offer this live assistance. It is important to note, however, that information-only hotlines are effectively used by many schools as a lower-cost option for providing homework information. These hotlines may improve both communication between schools and parents and homework completion rates among certain students (Iowa State Department of Education, 1994). For a description and review of information-based programs, the reader is referred to Thurman (1999) and U.S. Department of Education Office of Policy and Planning (1993).

How Should the Need for a Hotline be Assessed?

Past experience suggests that before initiating a hotline program, interested individuals or groups should conduct a thorough examination of the perceived need, available resources, and general feasibility for the hotline. For example, a survey by Singh (1987) found that 40% of teachers suggested *not* having a hotline at all, while only about 20% of parents and students expressed this opinion.

Although little information is available that specifically evaluates the need for a homework hotline, methods used by other youth programs are easily applied to hotlines. One framework is the three-phase model of needs assessment (Witkin & Altschuld, 1995). Using this framework, developers would first determine the need for a homework hotline. This might be indicated by determining whether there was a disparity between educators and/or parents' goals for homework and the actual performance of students. Next, the developers would focus on three groups: (a) the primary target group, students; (b) the secondary target group, those who will provide or regulate the program, such as teachers and school administrators; and (c) the tertiary target groups, those who could provide non-tutorial resources for the program such as funding, advertising, and space.

The evaluation would involve an exploration stage, a data gathering stage, and a post-assessment stage that disseminates and enacts the findings in order to establish the hotline. The process of engaging in these steps may vary and can include both formal and informal assessments that gather qualitative and/or quantitative data. For example, after establishing that a need existed for a hotline (that

is, some or many students were performing below expectations on homework), the hotline developer could conduct informal focus groups and then integrate this qualitative information with a more formal survey to describe potential actions. Other resources for program development include logic models (Julian, 1997) and intervention mapping (Bartholomew, Parcel, & Kok, 1998; see also Kelly, 1988; O'Donnell & Tharp, 1990; Winett, 1995).

What Are Important Considerations in Developing a Hotline?

There are a number of important considerations when improving current hotlines or initiating new programs. These include (a) the goals of the hotline, (b) the frequency and length of calls, (c) the times and duration of the hotline, (d) staffing, (e) targeted populations, (f) the academic material covered, (g) location, (h) funding sources, and (i) making people aware of the hotline's existence.

What are the goals of the hotline?

The initial impetus for establishing a hotline may determine decisions about its other characteristics. For example, a school with limited resources that is performing below statewide math standards might decide to have a hotline focusing primarily on math. In this case, the subject areas covered by the hotline might be dictated by a specific need. On the other hand, a school that is given a donation from a local telephone company will not need to establish funding mechanisms and will be free to determine academic content.

Imaginative use of hotlines can lead to additional goals. As noted earlier, hotlines can be used as a means of tracking student progress in order to fine-tune teaching. For example, one program utilized information from the hotline to identify which math concepts were most difficult for callers. Those concepts that led to the most calls were considered problematic and confusing for students and, appropriately, received additional classroom teaching attention (Kordomenos, 1991).

What is the expected call volume and length of calls?

It may be difficult to predict the volume and length of calls before the hotline is underway. Call

frequency varies extensively among programs, with some hotlines reporting as few as 35 calls a day while others receive more than 500 daily calls (Sivin-Kachala & Bialo, 1992).

Related to the frequency of calls is the length. One report of average call length suggests this varies as a function of the caller, with the overall average call lasting from 5 to 15 minutes, but calls from advanced or high school students lasting up to 45 minutes (Sivin-Kachala & Bialo, 1992). Thus, developers might anticipate that hotlines set up for more advanced students will require longer conversations.

When will the hotline be available and for how long?

Singh (1987) found that teachers and parents strongly preferred a start time after 6:30 p.m., while students were more mixed in their preferences, with a large percentage wanting a start time immediately after school. Differences also emerged regarding the duration of hotline availability. Parents and teachers preferred a hotline lasting 2 hours, while students favored 3 hours.

There is no clear consensus on the appropriate times to begin or end a hotline. Most are offered between the hours of 3:30-9:00 p.m. (Sivin-Kachala & Bialo, 1992) but a program might be available between 4-7 p.m., 5-8 p.m., or 5-9 p.m. For students, their primary need for assistance might be immediately after school, if they are the type of student who completes homework before beginning other activities. On the other hand, teachers who staff hotlines might desire a later starting time to have a break between the end of the school day and start of the program. Parents also might prefer a later start time as this corresponds to their own availability.

Another consideration for hotlines is what days of the week to offer the program. Most consistently provide assistance on Mondays through Thursdays when school is in session (Gutner, 1990; Pedley, 1987; Solomon, 1991). However, some programs recognize that students might be completing homework at other times. For example, Singh (1987) found that over half of students, parents, and teachers wanted a hotline to be available on Sunday nights. Finally, availability may vary between locations, based on staffing or building accessibility and the cost of opening the hotline for additional nights.

Who will staff the hotline?

Ensuring appropriate staffing for the hotline might include a discussion of (a) what grades and subjects it will serve, (b) whether staff should be able to provide broad help across multiple subjects or more specific assistance, and (c) how many staff will be needed. Having staff who can provide either specific or broad help is related to the targeted grade levels of the hotline; upper-level students might require more intensive help from a specialist (Sivin-Kachala & Bialo, 1992).

Considering the ethnic and cultural demographics of the targeted population is also important, as many hotlines incorporate staff fluent in languages other than English to serve a broader group of students. Having a special education teacher on staff is also recommended because he or she might serve as a valuable resource to other staff members and students calling in with unique needs (Solomon, 1991). Having accommodations for hearing-impaired students to participate would also increase the accessibility of the hotline (Wood, 1984).

Other factors might dictate use of staff other than teachers. For example, a hotline affiliated with a university might rely on college students who work for class credit. Some programs use high school students to staff elementary school hotlines. Among current programs, the uniqueness of needs and staffing decisions is reflected in staffing ratios, which vary from 2-15 staff members for every 100 calls (Sivin-Kachala & Bialo, 1992). On average, most programs operate with approximately 8-10 staff members and may have additional teachers as reserve staff for when someone is absent (Pedley, 1987; Sivin-Kachala & Bialo, 1992). Schools also may try to have an increased representation of staff with expertise in specific subjects, such as multiple elementary, secondary math, and foreign language teachers.

Implementation of specific requirements and procedures for training is another aspect of hotline staffing. Hotlines may require training for all volunteers or may make training less structured through the use of on-the-job or optional training sessions. The type and amount of training provided also might vary as a function of who is staffing the hotline; experienced teachers might need less training than high school or college-aged staff.

Furthermore, the training needs of individual staff members might vary depending on the experience they have in individual tutoring and/or the subjects that they will address in calls. Finally, compensation for staff generally varies depending on who is used. For example, teachers might receive monetary compensation while students staffing the hotline earn academic credit.

In addition to training, staff should be provided with appropriate and helpful resources to assist them with calls. At a minimum, teachers should be provided with basic reference materials such as encyclopedias, dictionaries, and almanacs. This can be provided through computers. More extensive resources might include teacher editions of all textbooks used in the covered region and contact information for further referrals (e.g., local library). Local teachers and schools also might provide the hotline with copies of daily or weekly assignments and additional materials that address frequently asked questions or concerns.

Who will call the hotline?

Current programs differ in their targeted population. Some programs include all grade levels while others target only certain ages. However, if communities decide to offer services to a more exclusive group, they should be prepared to receive calls from students outside this age range, as many programs report receiving questions from youth of all ages, regardless of the targeted age range. Based on past experience, it appears that youth in upper elementary and middle school grades are most likely to utilize a hotline.

Hotline organizers should be aware that students may use the hotline to meet emotional needs for personal communication with an adult, rather than the intended purpose of academic assistance. Programs should have a clear policy on such usage. Some hotlines may decide that this is an important additional benefit for students, particularly those who are going to homes without adults present (Gutner, 1990). These hotlines might have additional training or protocols for addressing the non-academic needs of students. Other hotlines might decide to focus strictly on academic needs and refer those students with personal concerns to other channels.

What kind of help should be offered?

When considering the scope of the hotline's academic content, it appears the most frequently asked questions concern math and science topics, suggesting the importance of staffing the hotline with specialists in these subjects or staff members who are able to handle calls of this nature. Surveys of parent and student requests revealed the need for mathematics as a hotline subject (Singh, 1987). On the other hand, teachers were more likely to endorse a general approach incorporating all primary subjects. As discussed previously, the academic content offered will vary based on goals, the targeted grade level, and staff.

Beyond subject matter, the process by which staff and callers interact is an important component of the program. Theories of learning, when applied to tutoring scenarios, suggest utilizing the hotline staff to provide direct instruction in guiding the student to complete the question independently (Solomon, 1991). This approach maximizes direction and guidance from the teacher while allowing students themselves to obtain the desired response.

Where should the hotline staff be located?

Most hotline programs are based in an office building, school, or library (Sivin-Kachala & Bialo, 1992). However, some programs might have staff work from their homes or other individual locations. Programs must also consider the accessibility of the hotline to their targeted students. In some areas, students may be outside the local calling area of the hotline. For these students, the prohibitive cost of making a long-distance call might prevent their utilization of the hotline services. Thus, program developers need to consider making appropriate accommodations, such as providing a toll-free number. Also, having an answering service or machine might be necessary to prevent students from receiving busy signals when all staff members are occupied.

How should the hotline be funded?

Of course, securing financial support should be completed prior to initiation of the hotline. Sponsorship for some programs has been obtained through local corporations, phone companies, or local radio and television stations willing to provide air time to

promote the program (Pedley, 1987). Other programs receive funding through grants from education associations, local and state groups, businesses, or individual foundations (Gutner, 1990).

Based on practices of current hotlines, different organizations may be uniquely equipped to provide financial or other forms of tangible support. For example, local libraries or universities may be able to donate space for a hotline "base," while local businesses might contribute used computers, reference materials, or support in exchange for advertisement of their participation. One program required callers to listen to a short commercial before speaking with a teacher.

Requests for funding should be based on a comprehensive budget of anticipated costs. Included in this might be (a) salaries (e.g., phone staff, administration, clerical); (b) computer equipment (e.g., caller database, educational resources via internet connections); (c) location costs (e.g., rent); (d) reference supplies; (e) publicity costs; and (f) telephone expenses. Furthermore, given the amounts spent on initiating and maintaining such programs (U.S. Department of Education Office of Policy and Planning, 1993), it would be important to establish clear effectiveness and usage data in order to support the continuation of the hotline.

How should the hotline be promoted?

Methods for disseminating information about the program might include mailing letters to parents, providing students with stickers and posters, or conducting contests and activities through the hotline (Gutner, 1990). It is important, however, to use multiple means of promotion and to involve students. Commercial support for promotion not only can provide additional funds and outlets (e.g., television, newspaper) but it can also allow for the development of community-school links (Solomon, 1991).

How Should Hotlines be Evaluated?

Research conducted on the effectiveness of existing homework hotlines can be characterized into two types: evaluation of academic or other outcomes associated with hotline usage, and evaluation of hotline characteristics. Unfortunately, there is little research in either area. This lack of evidence on effectiveness is a significant concern,

particularly for programs wanting to justify their continuance or future funding needs.

Conducting evaluations of hotlines is difficult, as a number of barriers discourage the use of high-quality research designs. One problem inherent in studies that randomly assign students to hotline and no-hotline conditions (the strongest design for judging effectiveness) is the difficulty of ensuring that all students assigned to a hotline control group do actually call. Furthermore, students in a no-hotline control group might still be aware of the existence of the hotline and could obtain calling information from participating students (Barrett & Neal, 1992).

In spite of these concerns, Barrett and Neal (1992) conducted a randomized experiment evaluating a hotline's effectiveness in improving academic outcomes among fifth-grade students. Forty-six students in the experimental group were encouraged to call the homework hotline while 44 students in the control group were not informed about the hotline availability. Of the 46 students in the control group, only 12 actually called the hotline, with these students making a total of 79 calls. Most of the calls concerned either math or spelling. Within the hotline group, information on students who called and those who did not showed no differences on self-esteem, school grades, or standardized test scores. The data indicated that the students calling the hotline did not exceed control group students on class grades or standardized test scores. In fact, when earlier test scores and grades were controlled, later test scores and grades of students in the hotline group were lower than predicted. Furthermore, comparisons between the hotline and no-hotline groups revealed an unexpected effect in that the control group scored higher in math, language, spelling, and social studies. Although this evaluation does not support the effectiveness of homework hotlines, the lack of participation by students in the hotline group may have influenced the findings.

An alternative to studies that use random assignment to conditions would be to use a quasi-experimental design. Here, students who called the hotline would be matched with students who did not call but are similar on other pertinent characteristics. Although potentially more practical, the

self-selection by students calling the hotline makes interpretation of these studies more tentative. We found no studies that used this design.

Another important aspect of evaluating hotlines is assessing the use of and satisfaction with the program. One way to do this is to track callers who call more than once. Solomon and Scott (1988) found that 47% of youth who previously utilized the hotline reported at least one return call. General satisfaction with the help received through the hotline was reported by 92% of student callers.

What should be studied in future research on homework hotlines?

Future hotline research should employ random-assignment designs when possible and well-constructed quasi-experiments as an alternative. Broad academic outcomes such as classroom and homework grades, homework completion rates, and standardized test scores certainly should be collected and would enhance information on the effectiveness of the hotline (Barrett & Neal, 1992). Data that should be collected about hotline usage includes the timing and frequency of calls and repeat calls, the frequency of calls for specific content areas, and caller satisfaction. Student surveys and questionnaires for parents and teachers might be used to obtain information on the hotline for evaluation purposes. Conducting qualitative studies (e.g., telephone interviews, focus groups) with staff and consumers of homework hotlines would also provide constructive information on the process of developing and maintaining a hotline. This information would be valuable to organizations wishing to initiate a homework hotline program or to existing programs looking for additional ideas and guidance.

Conclusion

Homework hotlines can be an effective and valuable tool for providing students with necessary homework assistance. Planning is essential in order to develop and maintain a successful program. Planning should include an evaluation of the need for a program with multiple groups, coordinating the content of the hotline with the needs of the targeted group, and conducting ongoing assessments of the hotline's effectiveness and usage.

Many schools and districts have successfully initiated and continued effective programs. Knowledge about the characteristics of current programs provides a useful, though incomplete, foundation for the development of new programs.

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