

The Effects of a Teacher-Created Web Page on Parent Communication: An Action Research Study

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Abstract: The purpose of this action research study was to determine why parents use or do not use a teacher-created web page as an informational resource, as well as how teacher-created web pages affect communication among parents, teachers, and students. Participants in the study consisted of ten parents/guardians of second-grade students. A survey was administered both prior to and after the intervention to determine what, if any, effects the web page had on communication. Parents were also asked to complete a questionnaire consisting of open-ended responses concerning those components of the web page they considered most beneficial. Parent interviews were conducted with five of the participants to gain further insight into the perceived usefulness of the web page. A teacher log of observation during the study allowed reflection concerning the implementation of the program. Based on evidence obtained from the surveys, questionnaires, and interviews, participants in the study viewed teacher-created web pages as an effective form of communication with schools. The most beneficial components of the web page were the classroom calendar and the one-to-one correspondence area. Parents stated that knowing what their children were learning about and how their children were performing academically helped them to stay more involved in their children's education. However, of the 68 possible participants to the study, only 10 parents opted to participate. Several factors could be related to this low level of participation. These factors include time constraints, the parent's lack of computer access or lack of knowledge of navigating the Internet, and a low level of interest in this form of communication.

Introduction

In 1996, Governor Roy Barnes and the Georgia Legislature enacted a set of collective mandates generally referred to as House Bill 1187. These mandates made schools accountable for the education of all students, thereby raising the bar of expectations for all school systems across Georgia. To effectively meet these new demands, schools began working on individual improvement plans addressing critical areas of need. One such area is parent involvement.

Research indicates there is a direct connection between parent involvement and student success. Harold Hester (as cited in Freedman & Montgomery, 1994) identified several important benefits for students whose parents take an active role in their education. Some of these benefits include improved student behavior, increased student motivation, higher student attendance, increased community support, and improved student attitudes.

Although there are numerous definitions for parent involvement, it can be generally referred to as the interaction that occurs between parents/guardians and the school. This can involve parent/teacher communication, parent participation in school-related activities, and active participation in the child's education. For the purpose of this study, parent involvement was defined as the communication that occurred between parents/guardians and the school system. Specifically, this study examined the frequency of use and perceived usefulness of teacher and parent web-based communication. The method of communication used in this study was a teacher-created web page. The content of the web page included information such as up-coming class projects or activities, subject skills taught, on-line resources for parents and students, and other information deemed relevant at the time. Additionally, a personal messages section allowed one-to-one correspondence between parents and the teacher. Parents were sent letters of information and instructions on accessing the web page.

As stated previously, research indicates a strong correlation between parent involvement and student achievement. A study conducted by Marcon (1999) attempted to determine the effects of parent involvement on inner-city preschoolers' development and academic performance. Data from the study indicated a significant increase in student performance when there was increased, active parent involvement. However, barriers to effective parent involvement exist. According to Lontos (1991), issues related to both parents' and teachers' perceptions can create barriers to parent involvement. A parent's sense of inadequacy or low self-worth could result in poor parent

involvement in their own child's education. Additionally, economic, emotional, and time constraints also play an important role in parent involvement. To increase parent involvement in schools, these obstacles must be addressed and, hopefully, overcome. In order to accomplish this, schools must adopt new beliefs and attitudes concerning parent involvement. These include ongoing communication between home and school, building trust between home and school, and recognizing language and cultural differences.

Bauch (n.d.) stated that "the first step toward active participation for families is a common information base with the schools" (p.2). Home-school communication can now take place in a variety of ways, including using computer-based communications. Bauch (n.d.) described the Transparent School Model as one type of electronic communication that can be implemented in a school system. Upon dialing the school "hotline" number from any tone-based phone, the teacher enters his or her secure voice mailbox and then records a 60 to 90 second message. Parents then call the "hotline" number and select their child's teacher. Parents are given the option of leaving a message once they have listened to the teacher's message. Abilock (1997) conducted a study involving the effects of Parent Internet Driving School on parent motivation. The program motivates parents to come to school to develop their skills and learn what their children are doing on the Internet. According to the study, the program has been successful in helping parents understand the value of the Internet to their children and to the school. Johnson (2000) describes the use of teacher web pages that help to build parent partnerships.

One of the major goals of my school is to increase parent involvement. This is accomplished in a variety of ways, such as parent/teacher conferences, family fun nights, and parent/teacher organizations. Although these methods help to improve parent involvement, we are continuously striving to increase the amount of parent/teacher communication. Factors such as teacher time constraints and a heavy workload make ongoing face-to-face and other synchronous communication difficult. In addition, my school is in the process of undergoing SACS accreditation. One of the major components of our internal SACS review is a plan to increase parent involvement.

Motivated by the literature and my own school's goals, I chose to study the effects of web-based communication on parent involvement. The purpose of this action research study was to determine why parents use or do not use a teacher-created web page as an informational resource, as well as how teacher-created web pages affect communication among parents, teachers, and students. Specifically, this study attempted to determine how the teacher-created web page affected the number of meaningful exchanges between parents and myself, and the parents' perceived usefulness of the web page. The following research questions were addressed:

- Do parents use teacher-created web pages as an information resource? How often? For what purposes?
- What information included on the web page do parents note as most beneficial?
- What implications does regular use of on-line communications have for parents, teachers, and students?

Methods

This study was conducted at a rural primary school in southeastern Georgia. The school consists of grades Kindergarten through Second, and has a population of 778 students. Approximately 59% of the student population qualifies for free or reduced lunch. The participants were parents/guardians of ten second-grade students. During the initial phase of the study, parents were sent letters of information instructing them on how to access the web page. Of the 68 possible participants to this study, 10 chose to participate. The racial make-up of the participants consisted of eight Caucasian families and two African-American families. Protection of the participants was achieved through written consent forms, website access codes, and guaranteed anonymity.

The method of communication used in this study was a teacher-created web page that included up-coming class events and activities, current subject matter and skills, informational resources for parents, and one-to-one parent/teacher correspondence. The web page calendar was updated on a weekly basis, and parents received information about their child's progress as specific skills were taught and tested. The duration of the research was approximately four weeks.

A survey was conducted prior to implementation of the web page to determine which forms of home-school communication parents utilized most often. The survey consisted of Likert-Response type questions. Upon completion of the intervention, participants of the study were surveyed again to note any affects the intervention had upon parents' choice of communication methods. Additionally, parent questionnaires were completed to determine the perceived usefulness of the web page. The questionnaires consisted of open-ended questions about the information on the web page. To gain further insight into the participants' attitudes toward the usefulness of the web page, interviews were conducted with five of the ten participants in the study. These five participants were chosen randomly. The interview consisted of open-ended questions pertaining to the most

beneficial and least beneficial aspects of the web page. A teacher log was kept throughout the intervention to record additional observations or insights gained during the study.

Results and Analysis

Prior to implementation of the study, I surveyed the participants to determine how many had computer access and which types of communication were used most often. I sent the surveys home with each student. Of the 68 surveys sent home, 65 were returned. Based on results obtained from the survey, the number of participants with computer access was only slightly higher than the number without access. Additionally, the survey indicated that parents communicated with the school most often by personal visits, telephone calls, and written notes. E-mail was not used as a form of communication by the parents. The pre-survey also showed that, although many participants had computer access, only a small group chose to use this access to participate in the study.

At the completion of the study, I sent the same survey to those parents who opted to participate. Information obtained from the post-survey did identify e-mail as form of communication with the school. However, the survey indicated that although e-mail was now included as a form of communication, it was not used often, and probably only through this particular web page.

Parent questionnaires provided further insight into the frequency of use and perceived usefulness of the web page. According to information obtained from the questionnaire, all participants felt that the web page was beneficial to improving parent/teacher communication. Information pertaining to individual students, the classroom calendar, and informational resources were considered to be the most valuable aspects of the web page. One suggestion for improving the web page involved increasing the number of on-line resources for parents.

Participants interviewed during the study felt that the web page had provided better communication with the school. All participants interviewed felt that the classroom calendar was the most beneficial component of the web page. Additionally, participants did not find any information on the web page that was not beneficial. One parent stated that knowing what her child was learning in the classroom was most valuable to her because she was able to help her child at home. Another parent felt the one-to-one correspondence on the web page helped her keep track of her child's progress throughout the quarter. One parent stated that the web page seemed to equalize the responsibility of establishing on-going communication between school and home. While the teacher is responsible for updating the web page and contacting parents concerning information relevant to a particular student, parents are responsible for checking the web page periodically for any upcoming news. All of the parents interviewed felt that all components of the web page were beneficial in some way.

In addition to surveys, questionnaires, and interviews, I kept a personal log of my experiences during the study. The log provided clarification and reflection during the course of the intervention, and helped to confirm findings following the intervention. Information in the log included observations concerning participants in the study, use of the web page, and data relevant to the study that was obtained through direct interaction with parents.

Discussion

Based on information obtained from surveys, questionnaires, and teacher interviews, all of the participating parents used the web page as an informational resource. However, as stated previously, some participants of the study used the web page more frequently than others, though the reasons for this were not clear.

Surveys and questionnaires also indicated that parents found the web page a useful source of information about their child. Many parents reported using the web page as a means of staying informed about their child's educational experiences. Parents stated that the classroom calendar kept them informed about the current activities occurring in their child's education and many identified the calendar as the most beneficial component. Parents also used the web page as a source of one-to-one correspondence with me. Through the "personal messages" section of the web page, I was able to keep parents informed about their child's academic progress. Additionally, parents were also able to contact me with specific questions or concerns regarding their child. These features apparently have value for parents and guardians. Fewer parents found the on-line references and resources section helpful, though at least one noted it provided additional help or practice on a particular skill being taught in the classroom. Participants in this study indicated that all of the information included on the web page was relevant and beneficial. However,

one participant did suggest that additional resources should be included to make the web page more useful but did not offer specifics.

The teacher observation log provided a good foundation for understanding the effects of the intervention and allowed me to reflect on the outcomes of the study. One interesting outcome involved the number of participants in this study. The pre-survey indicated approximately half the participants had access to a computer, but only one-third of that number actually chose to participate in the study. This may be due to the particular method of instructions given to the participants. The letter of instruction had to be signed and returned to the school. Many parents signed the letter, but did not record or remember how to access the website. Perhaps a different method of instruction, one where the parent signs a portion of the form but keeps the instructions for later use, would encourage greater participation. Another factor which might have affected the number of participants involved in the study was lack of computer skills, such as knowledge or confidence in navigating the Internet. A free, school-sponsored workshop for parents on accessing the Internet and the school website may have improved participation, but time constraints of the study did not permit this. In areas where home computer and Internet use is already high, I believe participation would have been greater. Other parents and guardians may simply have not had an interest in ongoing communication of this type, since phone calls, notes to/from teachers, and report cards on progress were readily available and more easily used.

With the increased availability of technology in today's society, electronic communication is being utilized more frequently. Schools are constantly looking for ways to more effectively increase communication with parents. E-mail and web pages offer schools new alternatives for communication and parent involvement. However, much research still needs to be conducted in this area. Factors both within and beyond the control of the schools need to be explored. Some of the factors that directly affected this study include parent's current skills with computer technology, access to the Internet, and parents' comfort with current methods of home-school communication. Further research related to parent communication needs to be explored as well. Forms of communication involving telephone hotlines to the school, e-mail and school web pages need to be studied to determine their relative effectiveness. Currently, my school is working on a web page designed to provide parents, students, and teachers online access to valuable information on school activities and events. The lessons learned from this study will certainly aid in that development.

Upon completion of the study, I communicated my findings to my building-level administrators via personal accounts of the results. During the scheduled conference, I demonstrated how the web page was utilized in the study via an Internet-connected computer. During the demonstration, I explained how a calendar of up-coming events is created, and how the web page allows one-to-one correspondence with parents. I also demonstrated how the informational resources available on the web page could be useful in increasing parent involvement at home and school. My school administrators found this information particularly useful since they are currently working on a school web page. They felt that the information gained from this study would be helpful in making the school web page more effective.

As evidenced by the results, web-based communication does have a positive effect on parent communication. The parents who participated in this study confirmed the value of the types of information and communication made available. However, many barriers to effective online communication, such as lack of computer access, lack of technical skills, and lack of knowledge about the available technology must be overcome before this form of communication can be more effective. Based on the response by the participants in this study, web-based communication as a way to increase parent involvement is certainly worthy of additional research.

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