

The Effects of Technology on Home/School Communication

Michael Ricke

South Dakota State University

Abstract

The importance of home-to-school and school-to-home communication has been well documented by researchers and acknowledged by school officials. A number of studies argue that there is a positive association between two-way communication, parental involvement, and student achievement. This study looks at the effects of technology on home/school communication and parental involvement in schools. The study looked at four different technologies: e-mail, school web-sites, cell phones, and student information systems and evaluated the impact of these technologies on the communication between the school and the parents and parental involvement. The study found that e-mail, school web-sites, student information systems, and cell phones are all good sources of school information and are the preferred and most convenient way for parents to communicate with schools. The study also found that the use of these communications technologies had a positive effect on parental involvement with the schools. These results seemed to hold true regardless of the parent's socio-economic status, gender, age or ethnicity.

The Effects of Technology on Home/School Communication

Bill Gates, founder and former CEO of Microsoft once said “The advance of technology is based on making it fit in so that you don't really even notice it, so it's part of everyday life” (Gates, 2001). This quote by Gates demonstrates how much of the technology we use on a daily basis we take for granted. For example, how many of us are amazed by the power of the television when we turn it on each day? Do we still get excited when we hear the phrase “you’ve got mail” on our computer? Are we mesmerized by the mobility and convenience of the cell phone? The answer to these questions for most Americans is “no!” Technology has become such a part of our everyday life that many people no longer notice it as technology – it is just a part of our normal routine and has become part of who we are as a society.

As society becomes increasingly dependent on technology, schools are investing more time and money in technology as a means of communication. Access to computer and Internet technologies is increasing in America’s public schools and work places and is providing both educators and parents with access to electronic communication. Today, most children of school age, their parents, and their teachers have spent a large portion of their lives using technology – whether it is looking at screens, listening to music, surfing the internet or talking on telephones. Technology has come to dominate American life and is an integral part of American life (Blanchard, 2008). The purpose of this paper is to evaluate the role of e-mail, cell phones, student information systems, and school web-sites on home/school communication. Furthermore, this paper will look at whether or not the use of these new communication technologies has increased parental involvement in their child’s education and the school community as a whole.

Advances in Communications Technology

In order for us to understand how technology has changed home/school communication, we must first understand the changes that have taken place in the field of technology over the last 20 years. Believe it or not, the World-Wide-Web has been around for less than 25 years. Invented in 1989 by Tim Berners-Lee in 1990, the web has changed the way governments, business and people operate (GCN Staff, 2007). The World-Wide-Web started a technology revolution that has impacted us forever. For the first time, people's eyes were opened to the idea of instant information and communication. The World-Wide-Web or simply "the Web," links everyone together with a universe of information available for all to access at the touch of a button. Almost every school, business, or agency out there now has a website available for consumers to access information, contact the business and even make purchases - all from the comfort of home. In fact, the Internet has become such a pillar of communication today that it appears it will remain the nucleus of all current and future developments within the industry (Cramer, 2012).

With the invention of the World-Wide-Web, websites were to follow. The earliest of websites were impractical, with only a few people having the browser software necessary to view and interact with the website. It wasn't until the Mosaic web browser was released in 1994 for use on Mac, Windows, and Amiga operating systems that the general public would start to gain access to the Web (Irina, 2012). Within a year of Mosaic's release, website creation and design took off. The late 1990s became known as the "dot-com" era with thousands of websites starting up. During the dot-com boom of the 1990s, some

websites were slapped together quickly, and it became a challenge for webmasters to keep up with the spikes in traffic. Web-site crashes and outages became headline news (Betts, 2002). Web design has continued to grow and develop since the dot-com era and today anyone – schools, business, agencies, families or individuals – can build a professional website. With easy to use tools, templates, and add-ons, designing and publishing your own website has become as easy as the click of a button. From its humble roots as higher agency technology to its practicality and ease of use, websites have successfully carved out a place in our everyday lives (Irina, 2012).

One of the biggest advances in communications technology has been electronic mail, or email as most of us know it. Email is not new. As a matter of fact, some people consider the telegraph to be a form of electronic communication and it dates back to the mid-1800s. Modern email got its start in 1977. At that time, email was primarily used for military purposes and was done over a closed network (Fleishman, 2012). With the inception of the world-wide-web, the email systems that we think of today started to take off. In 1996, two events changed the face of email forever. First, Microsoft released “Internet Mail and News 1.0” as a part of its third edition Internet Explorer – this later became known as the popular “Outlook.” In that same year, a few new companies – most notably “Hotmail” – began to offer free, use-anywhere internet e-mail. Within a year, almost 10 million users worldwide had web mail accounts (Left, 2002). By 2003, over 77 million Americans had access to the internet and email through either home or work. Today in the United States, over 90 million Americans access email through a mobile device, with 64% of those people doing so on a daily basis (Fleishman, 2012).

Email now virtually replaces hand-written correspondence sent through the postal system. Senders can not only send a direct message but also attach images and documents to the email, giving recipients immediate access to information that might otherwise take days to receive and even longer to edit or update as necessary. Additionally, email services retain messages sent between parties in your account until you delete them manually, allowing you to always have a record of communication (Cramer, 2012).

Perhaps no communications technology has changed the way we operate on a daily basis more than the cell phone. The cell phone gives us mobility, a sense of safety, and instant communication and information. The cell phone has changed drastically over the last twenty years. The cell phone has come a long way since Martin Cooper of Motorola placed the cell phone call to his rival AT&T on April 3, 1973 from the streets of New York City (Marples, 2008). Early cell phones were just for talking. Eventually, cell phone manufacturers began to integrate other technologies into their phones and expand its features.

The earliest smart phones let users access email, and use the phone as a fax machine, pager, and address book. In recent years, the purpose of the cell phone has shifted from a verbal communication tool to a multimedia tool. We now use our cell phones more for surfing the web, checking email, snapping photos, and updating our social media status than actually placing calls. Text messaging through mobile phones has become a popular way to communicate quick thoughts to friends, family and clients. Whether it's to promise a call later or simply to get down a thought before it's forgotten, instant text messages are a fast and convenient method of communication for many.

Modern day smart phones have changed everything that consumers expect from their phones. The app market has transformed the phone into a virtual toolbox with a solution for almost every need (AI Institute, 2011).

The Effects of Communications Technology on School/Home Communication

The daily operations of most families in the United States today are much different than they were a generation ago and technology has played an important role in that change. Communications technologies like cell phones, e-mail, and websites are some of the fastest changing and fascinating aspects of people's lives. The frequent release of the "latest and greatest" communications technology has placed it almost everywhere on the landscape of family lives. Regardless of the home, school or community where it is used, technology seems to have positive effects on people's lives. People have come to expect technology to impact their lives. For most people, technology seems to have very few limitations and almost magical strength (Blanchard, *The Family-School Connection and Technology*, 1997).

While traditional methods of communication such as face-to-face meetings are still effective (Decker & Decker, 2003); these methods require time that both parents and teachers seem to lack these days. Educators and schools are often very good at mass communications via newsletters, calendars, letters, and handbooks, but mass communications are not effective in shaping or changing attitudes. In order to change these attitudes, today's educators must become effective at interpersonal communication. Today's technology has been heralded as a tool that can provide new avenues for

communication, but studies show that parents and teachers are not embracing them to their maximum potential (Blanchard, *The Family-School Connection and Technology*, 1997).

Some early research (research taking place prior to the technology boom) suggested that teachers – especially new teachers – felt unprepared to communicate with parents. In her book *The Metropolitan Life Survey of the American Teacher*, Katherine Binns (1998) called on schools to work in partnership with parents to develop the cognitive and social skills of all children. Her survey found that only 17% of teachers believed they were prepared to work with parents and 44% of teachers believed that their training prepared them to adequately work with parents. In addition, the study concluded that 95% of the parents surveyed felt that student achievement would improve with more involvement between home and school (Binns, 1998).

Since that time, many advances in the field of communication technology have been made. Many schools had already made good use of the telephone for two-way communication between teachers and parents as well as using it as a tool to provide general information regarding school events. Gestwicki (2006) says that telephone communication facilitates two-way communication and parents may feel more at ease asking questions over the telephone wires as opposed to face-to-face. The telephone has the advantages of familiarity, easy use, and widespread availability. The increased availability of cellular phones now adds a new dimension to telephone communication. The number of cell phone subscribers has risen from 340,213 (1985) to 207,896,198 (2005)

and thus offers a new, readily available mode of telephone communication for both parents and teachers (Pearson Education Inc., 2007).

As advances in computer and telecommunications have increased, new opportunities to forge home/school connections have become possible. New programs implemented by schools in recent years to make desktop and/or laptop computers available to all students have increased communication between school and home. Innovative technologies such as cell phones, e-mail, and school websites provide schools with new tools for reaching parents and keeping them informed about their children. Still other programs link families with the school via student information systems and can be accessed from the Internet. These student information systems also known as “parent portals” provide parents with up-to-date information on school events or their child’s progress in school.

Internet technology is the most recent tool used by schools to communicate to a parent community. Increasingly, school websites are used to convey a broad range of school information. Students often become involved with both the technology and the content of the website and may work together with teachers to create and maintain the site. Teachers trained to use the school website can provide updates which are easily accessed by parents regarding homework assignments, test schedules, resource links, and so on. In fact, use of the internet can serve as an interactive tool for individualizing homework and supporting the involvement of families in the homework process. They noted a homework website can start with a simple format providing basic information to parents and students, and gradually increase in sophistication to create electronic assignment logs and individualized homework modifications for students, incorporating

appropriate password protection (Rogers & Wright, 2008). Technology also holds promise to allow teachers communication opportunities “not limited by school hours or location” (Brewer & Kallick, 1996). The capacity to link homes and schools with new technologies provides many novel opportunities to enhance communication with parents beyond the traditional formats.

One of the most popular options for communication from school to home is email. Email has become a part of nearly everyone’s everyday lives. Virtually everyone has an email address or can create one for free (Fleishman, 2012). Email can open up two-way conversation between parents and teachers that needs to occur for many students to succeed. Nearly all school districts provide email addresses for teachers to be used professionally so that teachers do not need to use a personal email address and the email address can be posted on a school website to be easily found. Another benefit to email is its ability to allow parents and teachers to communicate without having to be available at the same time. Parents and teachers can often miss each others’ telephone calls for several days before getting a chance to talk to each other, which can become useless with time-sensitive information. Email is a solution to this problem (Zieger & Tan, 2012).

In his 2008 study, Cotton Koch (2011) surveyed the parents of middle school students in a rural South Dakota School District to find out how strongly parental communication and involvement were connected to the use of various communications technology. Koch found that regardless of race, ethnicity, gender, age, and socio-economic status, parents indicated that they preferred to get almost all of the school information by email. The only exception to this was when the contact involved student discipline issues. In these cases, parents preferred to have a face-to-face meeting or conversation via

telephone. Further analysis of the data found that parents generally preferred the use of the electronic communication devices of email, websites, student information systems, and telephone (most preferring cell phone) as accepted substitutes of face-to-face communication with the school. The reasons given for this were convenience, time, and availability (Koch, 2011).

In a study by Rogers and Wright (2008), it was found that technology offers the parents the means to actively participate in the child's education without being visible in the school, thus fostering adolescent independence in a supportive environment. New technologies continue to be introduced, yet this study reveals that parents and teachers are not taking full advantage of technologies to bridge the communication gap and build family-school partnerships. Seventy-two percent of the parents surveyed in the study reported computer ownership, yet only 35.8% claimed to correspond with teachers via e-mail. In comparison, 100.0% of the surveyed teachers expressed access to an Internet-connected computer in the classroom and a high percentage of responding teachers (95.85%) indicated that they did use e-mail as a means of communication (Rogers & Wright, 2008). It seems that teachers are making use of the available technology to communicate with parents, yet according to the results of this study parents are not.

In a study by Ziegler and Tan (2012), many parents indicated that they prefer a phone call to communicate with their child's teacher. However, an overwhelming number of them (85%) responded that email is the most common method of communication used to contact teachers because they feel that it is preferred by teachers. With free and easily available email services, this is not a surprise, especially because teachers are provided with an email address through the school district. Email allows for both parents and

teachers to communicate at any time of day without teachers having to give a personal phone number to students or parents. Furthermore, parents found they were able to give a better and faster response to an email because each party could respond when they had the time. Also, if a parent was already online to check the grades, then it would be easier to simply email the teacher than to find the telephone extension and leave a message (Zieger & Tan, 2012). This coincides with the study conducted by Rogers and Wright (2008). They found that nearly all teachers preferred email, while most parents preferred more traditional methods of communication because they seemed to be more personal.

Does Increased Home/School Communication Increase Parent Involvement?

Technology has given parents and teachers the opportunity to explore new ways of communicating. New technologies have the power to improve the parent-teacher relationship by providing easy, efficient, and effective methods of transferring information. Parents that know what is going on in the classroom can more effectively support their children in learning and achieving in all aspects of their education. Specifically, over the past few years, student information systems have become widely used in many school districts, giving parents and students 24-hour access to their grades and information about upcoming assignments (Zieger & Tan, 2012). Technology has given parents and teachers the opportunity to explore new ways of communicating. New technologies have the power to better the parent-teacher relationship by providing easy, efficient, and effective methods of transferring information (Cramer, 2012). Parents that know what is going on in the

classroom can more effectively support their children in learning and achieving in all aspects of their education.

Research clearly shows that new technologies have improved teacher/parent communication which has in turn increased parental involvement in the schools. Parental involvement in their child's education leads to improvements in student learning, attendance, behavior and graduation rates (Blanchard, *The Family-School Connection & Technology*, 2008). Comer and Hayes (1991) defined parental involvement in three parts. Level one is the traditional method of communication such as parent teacher conferences, homework monitoring and fundraising. Level two consists of parent involvement in the classroom as volunteers, office support and supervision of the playground or field trips. Level three is when parents serve on decision making teams and school committees. Comer (2005) went on to say schools which involve parents at all three levels oftentimes see a dramatic turnaround from apathetic parents to enthusiastic and involved parents.

Parent involvement improves student learning and other student outcomes – especially when the parents help their child at home with learning. Increased parent communication increases parent involvement. Of the types of parent communication that influence parent involvement, those from the teacher that encourage the parent to become involved with the learning, that tell the parent what the child is learning and how the child is progressing, and that tell the parent how to support that learning at home are the most effective (Blanchard, *The Family-School Connection & Technology*, 2008). Technology can help the teacher communicate more frequently and more effectively with the parent. However, in order for that to occur, both the teachers and the parents have to have the appropriate technology available and know how to use it.

Summary

The purpose of this study was to determine the effects of technology on home/school communication. The ease and convenience of e-mail, internet, and cell phones has made it easier for parents to stay in contact with their child's school and for teachers and school personnel to contact parents. With a click of a mouse, parents can check the school calendar, look at their child's grades and see what assignments are due. Teachers and parents have more means to communicate than were available in the past – some of these include e-mail, cell phones and school web-sites. Parents preferred online communication for straightforward information, such as grades and homework, but they still prefer the more personal methods of communication (cell phone or face-to-face) for sensitive issues like behavior or learning issues. While some parents still elect to not use the technology that is being offered to them, the parents who do have increased communication with teachers and have also become more involved in their child's education.

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