

Conceptual Analysis of Web 2.0 Technology Use
to Enhance Parent–School Relationships

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Abstract

Parent–school relationships contribute significantly to the quality of students’ education. The Internet, in turn, has started to influence individuals’ way social communication and most school boards in Ontario now use the Internet to communicate with parents, which helps build parent–school relationships. This project comprised a conceptual analysis of how the Internet enhances parent–school relationships to support Ontario school board administrators seeking to implement such technology. The study’s literature review identified the links between Web 2.0 technology, parent–school relationships, and effective parent engagement. A conceptual framework of the features of Web 2.0 tools that promote social interaction was developed and used to analyze websites of three Ontario school boards. The analysis revealed that school board websites used static features such as email, newsletters, and announcements for communication and did not provide access to parents for providing feedback through Web 2.0 features such as instant messaging. General recommendations were made so that school board administrators have the opportunity to implement changes in their school community with feasible modifications. Overall, Web 2.0-based technologies such as interactive communication tools and social media hold the most promise for enhancing parent–school relationships because they can help not only overcome barriers of time and distance, but also improve the parents’ desire to be engaged in children’s education experiences.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

This study explored technological approaches—especially Web 2.0 technology that allows users to not only read information but also to interact and communicate with others about that information—that enhance parent–school relationships in Ontario. A conceptual framework of criteria for designing an effective Web 2.0-based parent–school communication tool was derived from the literature and used to analyze the extent to which three school boards take effective action via Internet to promote active parent–school interaction.

The parent–school relationship is generally described as a conversation or connection between schools and parents; Ames (1993) described such a connection simply as “communication” (p. 6). However, according to her, communication in this context assumes that the school as a whole is the information provider while parents are more like message receivers. Actually, the “connectedness” between parents and schools should involve more than mere “frequency of contact” (Ames, 1993, p. 8). Parents are the most significant partners of schools for children’s schooling (Berthelsen & Walker, 2008; Grolnick & Slowiaczek, 1994; Hill & Taylor, 2004) and they are considered to have shared responsibility with schools to “improve the education of children” (Ames, 1993, p. 5). It is also clear that the “quality” of the parent–school relationships “provides the impetus for parents to become involved” (Ames, 1993, p. 8).

Generally, schools encourage parents to participate in children’s education through activities such as parent–teacher conferences; as well they are willing to share information with parents, which is briefly called parental involvement or parental engagement (Beethelson & Walker, 2008; Pushor, 2007). These latter two notions can be

broadly defined as parental behavior (Berthelsen & Walker, 2008). The literature suggests that there is a difference between parental involvement and parental engagement, which will be explained in chapter 2. An ideal situation would be for parents to engage in their children's education actively and voluntarily, thereby demonstrating the behaviour of parental engagement.

In this project, active parental engagement is conceptualized as interactive activities initiated by parents with educators, including teachers, schools, and school boards administrators. In this case, the interaction involves two-way communication. It is not easy to evaluate the degree of desire parents have for being involved in their children's education experiences, nor the degree of effort parents put into their children's education experiences. Although it is a belief that parents are willing to put as much effort as they can to be involved in helping their children to succeed, there is no evidence to show that it is a common phenomenon. Thus some actions and strategies should be taken to prompt and stimulate parents' desire to communicate with schools actively so that they would like to engage. Therefore, schools or school boards often take on the responsibility of encouraging parents to demonstrate active parental engagement in order to establish interactive and effective ways of communication between parents and schools.

Effective communication in today's society incorporates multiple uses of Internet technology that facilitate working, shopping, doing business, and learning. In today's lifestyles, people spend increasing amounts of time on websites for learning and for communicating with others. Therefore, website creators put great effort into satisfying users to make them view the websites more frequently as well as stay on the websites

longer, the latter being referred to as “stickiness” (Rouse, 2005). The ability of Web 2.0 technologies to allow users to not only read what is supplied on the website but to also interact and communicate with others on the website is one of the most effective ways to promote stickiness—that is, keeping users on the websites and actively engaged (Gallaughier, 2008; Phipps, 2007). In this project, I explored the use of Web 2.0-based technologies to promote parental engagement and strengthen parental–school board communication.

Background of the Problem

My interest in analyzing the websites of school boards in Ontario stemmed from my course in field experiences whose main focus was to give international students like me a very basic idea of the educational system and structure in Ontario. For obtaining more information of the school board that related to the course, I searched its websites to get more information. When I was browsing the websites, I was not satisfied as a web user because the websites were basically made up of static webpages that did not offer any interaction. I felt that if I was a parent, I definitely would not go to the website and I would lose my interest and desire to communicate with the school board. Therefore, as a former website editor, I became interested in investigating a project that connected with Internet technology and parent–school relationships. After completing the course, I conducted further and deeper research on this topic. I read a great number of journal articles and books. Gradually the idea became clearer that the Web 2.0-based technologies had the potential to improve the parents’ experiences as web users, thus encouraging them to put more effort into online interactivity with school boards, consequently improving parent–school relationships.

Currently in Ontario, the parent–school relationship largely relies on offline communication such as parents meeting or phone calls (Ontario Ministry of Education [OME], 2005; People for Education, 2012). Technological methods/tools such as emails, newsletters, websites, and even social media are used as well. Most schools and school boards have created websites to deliver their information, and email systems to communicate with teachers, staff, and parents. Some schools even use social networking tools like Facebook and Twitter to interact with the community. According to the information found on the OME’s (2013) website, among 83 district school boards and school authorities, there are only 6 district school boards or school authorities that do not have their own websites. That is to say, 93% of the district school boards and school authorities in Ontario are using Internet technology for educational services.

Although the OME has made a considerable effort to enhance parent–school communication, parents in Ontario have expressed the need for active engagement in the parent–school relationship (OME, 2005, 2010; People for Education, 2012). According to the OME’s (2005) *Report of the Parent Voice in Education Project*, parents need a more effective communication system and the report emphasized that supporting a network of parents is important as well. In this report, email networks and informative websites are mentioned and parents believe that by these means they can have more chances to have two-way conversations with teachers, schools, and schools boards. Moreover, the OME (2005) noted that

Many parents said that they wanted to be able to communicate directly with the Minister of Education, and they stressed the importance of a grassroots approach. They suggested that the Minister come to regular meetings in their regions, but

they acknowledged that it may not always be possible to speak directly to the Minister. They said they wanted direct communication with someone who would be willing to listen and have the power to respond or act on the information. (pp. 14-15)

Actually, the seemingly impossible goal of speaking directly to the Minister of Education can be achieved via the technology approach. However, currently, there is a huge gap between the parents' need for interactive communication and the application of technology in parent-school communication. Not surprisingly, research showed that the way technology is used to support students' learning and provide effective interaction with parents received the lowest percentage of parent satisfaction when compared with other educational aspects (Sinay & Zheng, 2010). Even in 2012, when the Internet has become the most significant part of people's social life and way of communication, there are still only 60% of councils among Ontario school boards reportedly using email to communicate with parents and only 12% of parent councils use social media like Twitter or Facebook to communicate to their school community (People for Education, 2012). Since parent engagement is considered as a more active form of parent behaviour than parent involvement (Alberta Education, 2011), some effective ways of parent-school online interaction should be provided in order to arouse parents' desire of being involved, which would be helpful in establishing a more efficient and active parent-school relationship.

Statement of the Problem Context

In my review of the related literature, I found that there is a huge gap in relation to communication between the school boards and the parents' expectations. On the one

hand, parents are eager to be involved in school and to have direct conversation with teachers and education administrators; on the other hand, school boards fail to create an inviting and interactive environment to communicate with parents.

An initial review of the websites of the 31 English Public school boards, 29 English Catholic school boards, four French Public school boards, and eight French Catholic school boards in province of Ontario shows that most of those school boards in Ontario have Parent Involvement Committees or similar programs that focus on providing the necessary supports and assistance for parents' involvement at the regional level. Such programs also establish links between parents and the school board's director of education and trustees (OME, 2013). However, according to the websites, these school boards prefer to use workshops and conferences to communicate with parents rather than using technological means. Meanwhile, the review also shows that information posted on the websites largely comprises read-only documents and resources that do not allow parents to put any comments on them or provide immediate feedback.

Meanwhile, the external situation, particularly the development of technology, has an impact on the field of education. Many administrators and school board leaders do not have the background or adequate knowledge to utilize advanced technology as a tool for active communication. With the development of technology, a great number of Internet applications for communicating have emerged, which provide an interactive communication platform for communities. Most of the popular ways are based on Web 2.0 technology, such as Twitter, Facebook, and other social media tools (Gallaughier, 2008; Phipps, 2007; Travers, 2012). Considering the educational needs and the technological context, applying advanced technology in traditional parent-school

communication contexts would provide education with the power of allowing “users to collaborate, create resources, and share information in a distinctly different way than the static” (Gallaughier, 2008, p. 1).

There is therefore a need to build an awareness of the Web 2.0-based interactive platform, to explore and highlight how technological approaches can be used to promote more interactive communication with parents and school administrators. Building an effective and supportive interactive Web 2.0-based platform relies on feasible and functional criteria; hence, analyzing and understanding these criteria will be helpful to promote the importance of the Web 2.0 interactive platform for parent–school communication.

Purpose of the Study

The purpose of this study was to conduct a conceptual analysis of the features of Web 2.0-based interactive platform that enable its use for parent–school relationships, and to propose a conceptual framework of criteria and features for designing a Web 2.0 website to promote active parent engagement in the Ontario context.

The study addressed three research questions. First: How are Web 2.0 technologies currently used for purposes of encouraging communication among users? This question was addressed through a conceptual analysis of concepts in the literature related to Web 2.0 technology; which features of Web 2.0 technologies contribute to effective and active engagement among users; and current problems of using Web 2.0 technology for effective communication.

The second question asked: As a communication tool, how can Web 2.0 technologies enhance active parental engagement so as to establish an interactive way of

communication for parents and schools in Ontario context? The question was addressed by conducting a conceptual analysis of what constitutes effective and active parental engagement, and current problems of using Web 2.0 technology for effective parent–school communication in Ontario, as well as the possible solution for filling the gap between the increasing need of using the web as an instrument to better parent–school relationships and the existing outdated Web 1.0 (read-only) technology. The analysis led to the development of a proposed framework of criteria for promoting social interaction.

Finally, the third question asked: How are Ontario school boards currently using Web 2.0 technologies for parent–school communication purposes? This question was addressed by analyzing how the three school board websites in Ontario applied the features of Web 2.0 technologies for parent–school communication purposes, using the conceptual framework of criteria that I developed.

Rationale

Parent–school relationships play a significant role in education (Davis, 2000). How to make the parent–school relationship effective is worth considering. In general, schools need parents to contribute to school activities for students' development. However, schools cannot mandate parents to undertake such responsibility. Therefore, there is a need to encourage parents to take the initiative to engage in parent–school interactions.

The development of a framework of criteria for designing parent–school websites that promote social interaction is useful in analyzing existing parent–school websites in order to modify or design websites that promote active parent engagement. I believe that administrators and school board leaders who are willing to adopt the Internet (specifically

Web 2.0 interactive tools) as communication tools to communicate with parents will enable parent–school partnerships to develop more successfully.

Meanwhile, the external situation, particularly the development of technology tools that support interactive and engaging communication, has a great impact on the field of education. The situation is noteworthy. For one thing, many of those administrators and school board leaders do not have the background or adequate knowledge to utilize advancing technology as a tool for supporting technology enhanced communication. For another thing, it is necessary for them to possess such understanding. Therefore the framework can act as a guide for administrators in the design of their school board websites. The results of this study will enrich the knowledge to the field of education in the area of parent–school relationship as well as in the application of technology in the field of education.

Theoretical Framework

I understand “theoretical framework” as a theory-based map that gives guidance to a study. Put differently, it is a sort of a map-like summary of the theories that are adopted for a study. In my study, the theoretical framework will be informed by research in two areas: the technology context and the parent–school relationship context. They both refer to the concepts that I will adopt and the framework I will establish.

Outline of Remainder of the Document

Chapter 1 presents the background to the current issue, the statement of the problem, the purpose of the study, the rationale, and the theoretical framework. Chapter 2 presents a review of the related literature, including the history of the Internet, the progress of the web as a communication tool from the Web 1.0 to Web 2.0 era, the

utilization of Web 2.0-based interactive platform as a social communication tool, the significance of the parent–school relationship, and forms of parent–school communication. Chapter 3 outlines the method of conceptual analysis to develop the framework/criteria for using Web 2.0-based interactive platform to enhance active parent–school engagement. Chapter 4 provides the conceptual framework of the criteria and summarizes the results based on an analysis of three websites of selected school boards. Chapter 5 summarizes the results of the study and discusses the significance of building a Web 2.0-based interactive platform to enhance active parent–school communication, and implications for practice.

CHAPTER TWO: LITERATURE REVIEW

The review of the related literature was categorized into two broad areas. The first area was the educational context whereby I reviewed the research on parent–school relationships including the definition of different parent–school relationship types, the research on the significance of parent–school relationships in children’s academic performance, and the relationship of technology and parent–school relationship. The second broad category was the technology context in which I reviewed the development of the Internet, especially the progress of web technology from Web 1.0 to Web 2.0, including Internet applications which provide an interactive communication platform for communities.

Educational Context

While there are many aspects that contribute to the educational context (e.g., parents, teachers, school boards, schools, students, and cultural environment), the focus of the literature review will be on the parent’s role in education. Previous literature has addressed numerous aspects of the parent–school relationship. In this section literature will be reviewed and conceptualized to illustrate the significance of parent–school relationships and categories of parent–school relationships.

Significance of the Parent–School Relationship

The OME (2010) launched the parental engagement policy for Ontario schools, which indicates that engaged parental involvement benefits all parties including “students, parents and families, teachers, schools, and communities” (p. 5) which in turn makes schools increasingly a positive place for teaching learning and growing. Considerable research shows that parent–school relationships significantly influence

education in these multiple ways, and almost all studies agree that parent–school relationships benefit education (Carter, 2002; McIntosh, 2008). The OME (2010) emphasized the significance of such relationships:

Parents matter in education. They matter as vital partners who contribute much to the work of our educators, schools, and communities. They matter as parent leaders, parent mentors, and models of commitment to excellent in education, and they matter everyday as they influence and support their children’s academic achievement. (p. 1)

On the one hand, the parent–school relationship contributes to schools’ success and helps improve the quality of schools. For example, a positive parent–school relationship can help education administrators as well as policy makers understand the significance of developing better policy (Carter, 2002; Desforges, 2003; McKenna & Willms, 1998; Turner, 2000). Strong communication between parents and schools enables parents to have clearer understanding of school programs and policies, so that they can have an awareness of their children’s performance and progress relative to learning. More importantly, such a strong parent–school relationship enables parents to work with the school more effectively when there are some concerns or issues occur (Alberta Education, 2011).

On the other hand, parent–school relationships play essential and important roles in children’s academic outcomes (Davis, 2000; Desforges, 2003; Driessen, Smit, & Slegers, 2004; Epstein, 1986; Fan & Chen, 2001; Gianzero, 1999; Hill & Taylor, 2004; McKenna & Willms, 1998; Stelmach, 2006; Turner, 2000). Research shows that there is a strong positive relationship between parent–school communication and children’s

actual level of achievement. Parental involvement can improve student outcomes related to learning throughout their elementary, middle school, and even secondary years (Carter, 2002; Edwards & Warin, 2010; Gianzero 1999; Grolnick, 1997; Turner, 2000), including in their transitional stages—for instance from kindergarten to elementary school or from early childhood to adolescence (Carter, 2002; Hill & Taylor, 2004). Parents should be alongside teachers as key stakeholders of children's education experiences. Therefore, it is necessary that the connection and communication between schools and parents needs to be clear, structured, and consistent (Turner, 2000). When parents establish good relationships with schools, it is much easier for parents and schools alike to build a consensus about appropriate social and academic behaviour standards for students so that parents and schools can effectively communicate and guide children both at home and at school (Hill & Taylor, 2004).

Literature also shows that parents believe it is their role to take the primary responsibility for children's educational achievement, as well as share responsibility and the common goals with teachers to help their children to achieve most efficiently and effectively (Ames, 1993; Berthelsen & Walker, 2008; Brien & Stelmach, 2009; Carter, 2002; Davis, 2000; Desforges, 2003; Epstein, 1986; Fan & Chen, 2001; Gianzero,1999; Graham-Clay, 2005; Grolnick & Slowiaczek, 1994; Hill & Taylor, 2004; Hoover-Dempsey, Bassier, & Brissie, 1987; Huseth, 2001; McKenna & Willms,1998; Stelmach, 2006; Turner, 2000). Parents benefit as well by a positive and successful parent–school relationships. Such relationships can provide more information as well as increase parents' skills, which makes them have more knowledge and increases their ability to assist their children in their school-related activities (Hill & Taylor, 2004). Specifically,

parents can learn from the schools how to help their children in both homework and social skills. Also, they learn about school information, school policies, and practices, as well as extracurricular activities from other parents.

Types of Parent–School Relationships

Parental behaviour varies from parent to parent as it relies on the ability of parents to understand what is happening in the school and school board. Generally, the way parents understand and construct their behaviour is diverse, and the reason that parents are participating are diverse as well. Also, multiple definitions of parent involvement have been proposed and defined broadly based on parents' behaviour on behalf of children, as well as on parents' expectations for their children's future education (Berthelsen & Walker, 2008).

Literature shows that the parent–school relationship is characterized by the parents' actual contact with schools, including being present at general school meetings, talking with teachers via either phone calls or face-to-face communication, attending parent–teacher conferences, attending school events, volunteering at school, and home-based involvement including assisting children with school related tasks like homework and talking with children about academic issues (Bloch, 2002; Graham-Clay, 2005; Grolnick & Slowiaczek, 1994; Hill & Taylor, 2004; Huseth, 2001; McKenna & Willms, 1998; Pomerantz, Moorman, & Litwack, 2007; Thompson, 2009). Graham-Clay (2005) explained that the parent–school communication initiated by teachers refers to informing parents about events, activities, or student progress through a variety of sources, such as an introductory letter at the beginning of the school year, classroom or school newsletters, report cards, and newsletter and school websites. However, these websites

mentioned were only able to carry out the function of delivering information to parents and did not promote parent initiated communication.

When considering the parent–school relationship, there are three terms that are often discussed in the literature: parental participation, parental involvement, and parental engagement (Berthelsen & Walker, 2008; Pomerantz et al., 2007; Pushor, 2007). Some researchers consider the three terms as the same or similar concepts while others insist that these three terms stand for different attitudes or forms of parent behaviour.

According to Berthelsen and Walker (2008), parental behaviour may be described by three kinds of attitudes. First of all, some parents “may be active because parents believe that they bear the primary responsibility for children’s educational achievement” (p. 35). The second kind of parents “may hold a notion of partnership with schools that responsibilities for children’s learning are shared between parents and schools” (p. 35). Thirdly, some other parents “may not believe that they should take an active role or may lack the confidence to be involved” (p. 35). Such different attitudes can be summarized as active, neutral, and passive communication.

Grolnick and Slowiaczek (1994) defined parent involvement as the dedication of resources by the parent to the child within a given domain. Pushor (2007) explained that the word “involvement” originates from the Latin, and the primary meaning in education domain refers to “‘to roll into’ and by extension implies wrapping up or enveloping parents somehow into the system” (p. 1). Also, Pushor emphasized that parents who are involved in serving school’s affairs do so generally by doing the things that educators “ask or expect them to do,” for example, “volunteering at school, parenting in positive ways, and supporting and assisting their children at home with their schoolwork ”(p. 2).

Parent involvement in children's schooling as behaviours can be measured in multiple ways including: concern for and participating in activities at school (e.g., attending parent-teacher conferences and school activities, volunteering at school) and at home (e.g., helping with homework, asking about school); knowing about and keeping abreast of what is going on with the child in school; communicating with teachers and other school personnel; assisting in academic activities at home; and attending school events and parent-teacher conferences (Grolnick, 1997; Hill & Taylor, 2004). Parent involvement is influenced by many factors such as the degree to which parents can understand the significance of the relationship, and the degree to which the schools offer support. As Berthelson and Walker (2008) stated, "Schools play a strong role in determining the level and nature of parental involvement" (p. 36).

Parental engagement in schools is defined as parents and school staff working together to support and improve students including children and adolescents regarding to their learning, personal development, and health" (Centers for Disease Control and Prevention, 2012). Pushor (2007) distinguished between the two concepts of "parental involvement" and "parent engagement"; she argued that parent engagement is "an alternative way to bring teachers and parents together in schools, an alternative possibility for changing the scripted story of school" (p. 2).

Alberta Education's (2011) AISI project suggests that there are three stages in parent-school relationships: communicating, involving, and engaging. The AISI project suggested that parent engagement is the more active way in which parents involve themselves with school and actively participate in their child's learning. The AISI project also suggested that the process from parental involvement to parental engagement was

evolving rather than separated. The project described the growth from parental participation to parental involvement to parental engagement as the process from “parents being informed” to “parents showing their support” to “parents taking an active role” (Alberta Education, 2011, p. 2). Furthermore, Pushor (2007) emphasized that

Engagement implies enabling parents to take their place alongside educators in the schooling of their children, fitting together their knowledge of children, teaching and learning, with teachers’ knowledge. With parent engagement, possibilities are created for the structure of schooling to be flattened, power and authority to be shared by educators and parents, and the agenda being served to be mutually determined and mutually beneficial. (p. 3)

Technology and Parent–School Relationship

The interaction between parents and teachers is the most fundamental form of parent–school relationships. There are traditional ways of communication as well as brand-new ways supported by the web. Traditional ways refer to the ways mentioned previously, like face-to-face communication, attending parent–teacher conferences, attending school events, as well as volunteering at school. Huseth (2001) described several effective ways that he has used for communicating with parents, including weekly phone calls and progress reports, which are considered to be “old methods” (p. 7).

There are also some new communicative ways to develop parent–school relationships such as email, classroom webpages (which only provide web calendars and web links), voice mail, video technology, radio announcements, and school websites (Bloch, 2002; Graham-Clay; 2005; Huseth, 2001; Thompson, 2009). Actually, prior to 1996, Brewer and Kallick (1996) had predicted the trend of technological communication as a

promising way that would allow teachers to have communication opportunities “not limited by school hours or location” (p. 181). Compared with traditional ways of communicating, email is an effective way for teachers to share the students’ information with the parents, especially in the informational era. Even though there are multiple problems and some drawbacks for using email to contact parents, it is still widely used for the purpose of encouraging parents to be involved and it is regarded as the most popular and most effective form of parent–teacher interaction in the school context (Bloch, 2002; Graham-Clay, 2005; Huseth, 2001; Thompson, 2009). Such a way has advantages over more traditional forms of parent–teacher communication (e.g., phone calls or conferences) because asynchronous communication makes teachers more accessible to parents. Compared with traditional ways of communicating, email is an effective way for teachers to share the students’ information with the parents, especially in the informational era (Thompson, 2009).

The Center for the Study of Education Policy (CSEP, 2004) conducted research to explore the extent to which the schools in the state of Illinois in the United States used technology for communicating with parents. According to the CSEP, technology mainly refers to email and webpages. The CSEP report indicated that although Internet-based technological methods were among the variety of methods used by schools to communicate with families, there were still a number of issues raised by parents. One of these issues was the unavailability of technology for parent–school communication such as lack of phones or access to the Internet and/or ability to use it in many families. Other barriers influencing parents’ desire to use Internet-based communications included cost issues, privacy issues, time issues, and even multiple languages. Nonetheless, researchers

believe that Internet-based technological access should be readily available in schools and they believe that there is a consensus that technology to improve the parent–school relationship through electronic tools like websites, social media, software, newsletters, calendars, and videos is increasingly being utilized to communicate with the home (Alberta Education, 2011; CSEP, 2004).

How to Maintain the Parental–School Relationship

The key to developing and maintaining the parent–school relationship is continuous communication with parents through effective strategies. In Ontario, the majority of administrators of elementary and secondary schools are aware that communication plays an important role in education. According to the People for Education’s (2012) *Report on Ontario’s School Councils*, the majority (75%) of school councils recognized the important role that communication plays for developing and maintaining relationships between the schools and parents.

Whether parents would like to have effective parent–school relationship depends to a great extent on the degree to which parents understand the significance of parent–school relationships (Berthelsen & Walker, 2008). Furthermore, Berthelsen and Walker (2008) suggest that it is very important to encourage the parents who lack personal self-efficacy beliefs to be involved in order to gain an awareness of their role in supporting their children’s education.

Research shows that teachers and parents should share equal responsibility for the education of their children; however, there is evidence that parents place a great deal of trust in their children’s teachers (Brien & Stelmach, 2009; Stelmach, 2006), and that some families’ home conditions prevent them from participating in their children’s

education in ways that teachers would like (Gianzero, 1999; Stelmach, 2006). The idea of legislation to mandate the rights, responsibilities, and role of parents in their children's education experience for "ensuring all parents have a right to participate in their children's schooling" is only a superficial effort (Brien & Stelmach, 2009, p. 6). The requirement to mandate parents to be involved in education is apparently a challenge and it is questioned. Therefore it is necessary to empower parents with the desire to be involved instead of mandating parental involvement (Gianzero, 1999; Stelmach, n.d.).

It is very important for the school boards to provide significant opportunities for parents to contribute meaningfully to school decisions. The strategies schools implement to enhance parent-school relationship is a significant aspect that will influence the degree of effort that parents are willing to put in. Parents feel comfortable when the school provides them with a welcoming, friendly, and inviting atmosphere and implements useful strategies such as sufficient information related to their children's school life, and effective support enhances the parent-school relationship (Graham-Clay, 2005; Huseth, 2001; McKenna & Willms, 1998; Parent Involvement Committee, 2012). In other words, school is one of the sources that provide a welcoming invitation to parents to be involved (Berthelsen & Walker, 2008).

Successful and effective parent-school interaction can also be established through social networking among parents and communities. Parents may establish social networking with other parents because the social networking is helpful for providing and sharing information either from schools or from communities (Hill & Taylor, 2004). According to Hill and Taylor (2004), "when parents are involved in their children's schooling, they meet other parents who provide information and insight on school

policies and practices, as well as extracurricular activities” (p. 162). Such connections can help parents understand how difficult some situations are and handle them successfully (Brien & Stelmach, 2009).

Successful and effective parent–school interaction can stimulate parents’ desire for active engagement. It involves a relationship where possibilities are created for the parents to share power and authority with educators and where both parties benefit mutually (Carter, 2002; Gianzero, 1999; Pushor, 2007). Gianzero (1999) has stated that parents always have the desire to be involved but they are not certain how to practise it. Therefore active parent engagement is also facilitated by having parents acquire knowledge and strategies to create a home environment that fosters learning, as well as instructing them how to provide support and encouragement for their children’s success (Carter, 2002).

Technology Context

Over the past few decades, the rapid evolution of information technology started to change social life in a significantly amazing way (Collins, Coulson, Zhu, Rohm & Stewart, 2006; Dippelreiter et al., 2008). The digital revolution, which usually refers to the advent of the Internet, marked a turning point in the early years of the 21st century (O’Reilly, 2007). Particularly, such a digital revolution changed people’s way of communication. Organizations started to adapt existing web technology to undertake multiple communication modes, and increasingly relied on this “technological and sociological paradigm shift” for communicating informally and formally with others (Dippelreiter et al., 2006, p. 329). With the development of Internet technology, the platform of the web community has developed from Web1.0 to Web 2.0. Simply stated,

Web 1.0 platforms are made of a set of static webpages and lack interaction while Web 2.0 platforms are made of a set of user-generated webpages and focus on interaction among users and Internet website creators, as well as users' experiences (Antonelli, 2009; Downes, 2005; Graham, 2005; Greenhow, Robelia, & Hughes, 2009). The application of Web 2.0 technologies provides active engagement for users, and has become part of many fields, including social networking, marketing and sales, and even learning and teaching.

Notions of Web and Internet

The World Wide Web (aka the web) was created in 1989 by Sir Tim Berners-Lee (Naik & Shivalingaiah, 2008) and it is always considered as synonymous with the term Internet (Aghaei, Nematbakhsh & Farsani, 2012; Beal, 2010); however, while the two terms are related, they are not synonymous. Beal (2010) defined the term World Wide Web as a way that helps to get access to information over the medium of the Internet and it is a way of information-sharing model that is built upon top of the Internet. McKenna (1999) explained the Internet as the “worldwide electronic network that carries digitized data from one node to another node in that network” (p. 249).

A review of the development of web technology shows such technology was developed primarily for and by scientists and engineers, especially those working for the U.S. government and military, who needed to quickly communicate and share large amounts of information. Later on, with the interaction of economic factors and technology such as the great price drop in personal computers, the increase in speed and storage capacity of computers and servers, and the developing of Internet “browser” software, the Internet has become an interpersonal communication and information

sharing tool. As McKenna (1999) described, “hundreds of millions of people are connecting themselves and their families to the Internet through their personal computer, telephone line, and usually a ‘portal’ company” (pp. 249-250).

With the development of information technology, the technology of the web has changed. In 1999, Rea and White predicted that “sooner or later most Web users would like to become Web writers” (p. 421). Also, Kristin (n.d.) emphasized that web writers were not homepage creators, which was to say as a web writer, they are not required to have the knowledge or skills to write those codes or design a program; they merely write and post on the web (pp. 5-6). Generally, people use sequencing numbers as the version of web to distinguish the progress or the evolution of Web technology, from Web 1.0 to Web 2.0, Web 3.0, and so forth. Aghaei et al. (2012) describe the progress or web technology as “Web 1.0 as a web of cognition, Web 2.0 as a web of communication” (p. 1).

Web 1.0 and Web 2.0

Although the exact definition of Web 1.0 is a source of debate, it generally refers to the web when it was a set of static and read-only websites that did not provide interactive content (Aghaei et al., 2012; Naik & Shivalingaiah, 2008). As the initial stage of web technology, Web 1.0 was simply made up of pages grouped into websites and connected by hyperlinks. Technically, those websites were largely static, hand coded, and hard to change (Graham, 2005). Therefore it is not easy for most people to put up a website unless they have specific technical skills. Aghaei et al. (2012) defined Web 1.0 as the first generation of the web which was considered as the read-only web: “The early web provided a limited user interactions or content contributions and only allowed to

search the information and read it” (pp.1-2). In Web 1.0, a small number of writers created webpages for a large number of readers. As a result, people could get information by going directly to the source. The WWW or Web 1.0 “is a system of interlinked, hypertext documents accessed via the Internet” (Naik & Shivalingaiah, 2008, p. 500). Therefore the features of Web 1.0 can be briefly generalized as mostly read-only websites with limited interactivity (Evans, 2008), and many websites used frequently today are considered Web 1.0.

Scholars admit that there is not an exact definition of the tricky term “Web 2.0.” like so many other popular technology terms (Gallaughier, 2008). The origin of the term Web 2.0 is also debatable. O’Reilly (2007) insisted that the term Web 2.0 was created by DiNucci (1999) and then developed by Dougherty and O’Reilly. However, it is still believed that the term Web 2.0 was officially defined in 2004 by Dale Dougherty, vice-president of O’Reilly Media, in a conference brainstorming session between O’Reilly and MediaLive International (Aghaei et al., 2012). According to O’Reilly (2007), Web 2.0 is defined as

the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation,” and going beyond the page metaphor of Web 1.0 to deliver rich User Experiences. (p. 17)

The core of this new technology is about how the website is shifting from a read-only to a read-and-write web, not just static pages but shareable content, forging links between “nodes” to build networks, participation, and user-generated content that is collaborative and open (Antonelli, 2009; Downes, 2005; Graham, 2005; Greenhow et al., 2009). Through Web 2.0 websites, there is no longer passive viewing of content and the users are allowed to interact and collaborate with each other as creators of user-generated content in a virtual community with less control (Aghaei et al., 2012; Muuß-Merholz, 2011). In other words, Web 2.0 relies on a great number of users who “voluntarily engage in collaborative work” (Prilla & Ritterskamp, 2008, p. 35). Users in Web 2.0 are not only the audience who accepts information passively but also broadcasters who spread information actively (Muuß-Merholz, 2011).

Essential Features of Web 2.0

The main features of Web 2.0 technologies are generalized in the literature as: (a) a platform for application and information sharing; (b) as a tool for social interaction and collaboration; and (a) as a communication tool.

Web 2.0 is a platform that allows applications to be delivered and used through a web browser (Aghaei et al., 2012; Alexander, 2006; Arnott & Bridgewater, 2002; Bates, 2011; Chau & Xu, 2012; Cormode & Krishnamurthy, 2008; IBM Corporation, 2008; Kaplan & Haenlein, 2010; Kristin, n.d.; Murugesan, 2007; Phipps, 2007). The web as platform becomes “an implicit ‘architecture of participation,’ a built-in ethic of cooperation, in which the service acts primarily as an intelligent broker, connecting the edges to each other and harnessing the power of the users themselves” (O’Reilly, 2007, p. 22). The web as participation empowers users to “make themselves seen and heard in

online spaces,” and the web as collaboration (also understood as “crowdsourcing”) refers to the idea that “a large group of people can create a collective work whose value far exceeds that provided by any of the individual participants” (O’Reilly, 2009, p. 2). Web 2.0 is both a platform where innovative technologies have been built and a space where users and the content they upload and share with others is regarded as important (Aghaei et al., 2012; Murugesan, 2007).

Web 2.0 is the architecture of participation and information sharing systems designed to encourage and support users in contributing. (Alexander, 2006; Anderson, 2007; Arnott & Bridgewater, 2002; Bates, 2011; Chau & Xu, 2012; Graham, n.d.; Kaplan & Heinlein, 2010; Kristin n.d.; Phipp, 2007; Saha and Grover, 2011). Saha and Grover (2011) explain that “The term Web 2.0 is associated with web applications that facilitate participatory information sharing, interoperability, user-centered design, and collaboration on the World Wide Web” (p. 16).

Web 2.0 is a rich, interactive, user-friendly interface that allows many of the tools, websites and applications to be developed with user consultation, leading to developments based on user needs and wants (Alexander, 2006; Anderson, 2007; Arnott & Bridgewater, 2002; Chau & Xu, 2012; Cormode & Krishnamurthy, 2008; Gallagher, 2008; Graham, n.d.; IBM Corporation, 2008; Kaplan & Haenlein, 2010; Phipps, 2007).

Web 2.0 incorporates elements of social networking such as Facebook that promote social interaction (Alexander, 2006; Anderson, 2007; Arnott & Bridgewater, 2002; Chau & Xu, 2012; Cormode & Krishnamurthy, 2008; Graham, n.d.; Kaplan & Heinlein, 2010; Phipps, 2007). The amazingly rapid progress of information technologies enables people to have much more convenience of access to communicate (Huang, Ku,

Chao, Lin, & Chen, 2012). The increasing popularity of Web 2.0 has led to exponential growth of interaction among people through the Internet (Chau & Xu, 2012). Web 2.0 was significantly applied in social media and influenced people's social lives in a great way (Gallaughier, 2008).

Web 2.0 is important for communication (Bates, 2011; Collins et al., 2006; Dixon, n.d.). Chu's (2012) case study explored the impact of Web 2.0 as a tool for improving staff communication and cultivating community awareness under an academic library context. According to her study, Web 2.0-based communication can "organize and reorganize information quickly for staff communication" (p. 148). What is more, other than information access, "the Web site also functioned as a catalog of events and notifications, allowing staff to view the developments in their unit as chronological chains of entry posts by topic" (p. 148). Meanwhile, a user-oriented capability is one of the very important features of Web 2.0-based website because content can be added, removed, revised, and reorganized. The focus of the website implementation becomes more about the content's usefulness and less about adapting to the technology.

Saha and Grover (2011) also described qualitative approaches to measure quality of websites. More importantly, their paper identified and discussed the key website quality dimensions. According to them, the most significant feature of Web 2.0 is "all about harnessing collective intelligence"; therefore, the "backbone" (p. 15) of Web 2.0 applications largely depends on responding to massive amounts of user-generated data in real time. Meanwhile, Saha and Grover summarized several of the most significant characteristics that a core Web 2.0 service should have, including: web as platform, user-centered design, rich user experience, crowd-sourcing, and collaboration.

Distinction between Web 1.0 and Web 2.0

The essential difference between Web 1.0 and Web 2.0 is that there were few content creators in Web 1.0 and the vast majority of users simply acted as consumers of content, while any user can be a content creator in Web 2.0, using the many technological aids that were created to increase the potential for content creation (Cormode & Krishnamurthy, 2008). Kaplan and Haenlein (2010) clarified the distinction of Web 2.0 from Web 1.0 as social media and user-generated content. To be specific, Web 2.0 is a platform where contents and applications are continuously modified by all users in a participatory and collaborative fashion instead of being created and published by individuals (Kaplan & Haenlein, 2010). According to Greenhow et al. (2009), the distinction between Web 1.0-based website and Web 2.0-based website is whether “the users browsed, read, and obtained information and were directed through a site from a common entry point or ‘front page’” (p. 247). Modi (2004) listed the essential difference between Web 1.0 and Web 2.0 from a dynamic perspective. He described the trend from Web 1.0 to Web 2.0, which is from a read-only to a read-and-write web; less user-generated content to more; and static published content to user-contributed dynamic published content. Muuß-Merholz (2011) summarized Web 2.0 as a “Readable/Writeable-Web” and went on to say that participants “are not only supposed to listen, but also to get engaged, to contribute, to discuss, to create, to share, to connect—in sum: to participate” (p. 1).

According to Graham (2005) and Dixon (n.d.), six out of nine of the most popular online activities rely on Web 2.0., including email, social networking (e.g., Facebook), voice and video communications, chat rooms, instant messaging, online forums, online

discussion lists, online news feeds, and microblogs (e.g., Twitter).

There are multiple reasons that Web 2.0 started to replace Web 1.0. It is expected that Web 2.0 could even replace desktop computing applications for many purposes (Naik & Shivalingaiah, 2008). Graham (2005) believed that compared to Web 1.0, Web 2.0 is helpful in establishing and expanding “unofficial” social networks or connections among users and provides them with a platform to interact with each other. The Web 2.0 applications used for communication are not limited by distance and time, and are free to use.

Web User Experiences and Stickiness

Definitely, when considering the use of technology in parent–school relationships, human factors are a very vital concern. Hassenzahl (2008) pointed out that recent discussions about using technology as tools focus too much on the “technology use in itself” (p. 1) instead of viewing “what people do with and gain from technology: insight, pleasurable stimulation, social exchange are the true underlying motives for technology use; feelings and experiences its true outcomes” (p. 1). All of the emotional factors Hassenzahl mention actually are essential for both the product designers and developers, and can be grouped as “*User Experience*.”

The meaning of *User Experience* is of great importance, although it has numerous definitions (Law, Roto, Hassenzahl, Vermeeren, & Kort, 2009; Scapin, Senach, Trousse, & Pallot, 2012). Scapin et al. (2012) cited a very official definition from ISO: ISO 9241-210 (2010), which summarizes *User Experience* as a “person’s perceptions and responses” that “result from using a product, system or service” and should include the users’ “emotions, beliefs, preferences, perceptions, physical and

psychological responses, behaviors and accomplishments that occur before, during and after use” (as cited in Scapin et al., 2012, p. 1). *User Experience* is a consequence of brand image, presentation, functionality, system performance, interactive behaviour and assistive capabilities of the interactive system, the users’ internal and physical state resulting from prior experiences, attitudes, skills and personality, and the context of use. Simply stated, user experience can be described as “how a person feels about using a product, i.e., the experiential, affective, meaningful and valuable aspects of product use” (Vermeeren et al., 2010, p. 521).

Even if it is not easy to define this concept because it includes considerable “emotional, affective, experiential, hedonic, and aesthetic variables” (Law et al., 2009, p. 1), there is one thing that can be agreed upon, which is that *User Experience* is an “ongoing reflection” or “a constant stream of self-talk” related to products or events (Hassenzahl, 2008, p. 1). Hassenzahl (2008) goes on to explain that there is one component that will always be a part of experience, which is a momentary feeling that either positive or negative in various intensities and this continuous good-bad-feeling could regulate users’ behaviour. Therefore, users should keep asking themselves, “How good or bad do I feel at the moment” and such a constant questioning will influence their future behaviors (Hassenzahl, 2008, p. 2).

Scapin et al. (2012) have found that the concept of *User Experience* has become important in the marketplace in relation to new computer devices, mobiles, and tablets. Hassenzahl (2008) asserted that *User Experience* is “a momentary, primarily evaluative feeling (good-bad) while interacting with a product or service” (p. 1). If the “product or service” is defined as an online product or service, the concept of user experiences here

will be much more specific. Prilla and Ritterskamp (2008) believe that the characteristics of Web 2.0 should include three aspects: very simple usage, immediate feedback and structural level, and valuing each user's contributions. Prilla and Ritterskamp's explanation develops the definition of what good user experiences should be.

In the technology domain or Internet area, good user experiences make web users have satisfying perceptions and make them stay on a series of webpages longer (IBM Corporation, 2008). Such behaviour is related to the other concept, which is called "stickiness." Rouse (2005) cited the definition of stickiness as "anything about a Web site that encourages a visitor to stay longer" (para. 1). As well, Rouse explained the term "sticky" by describing the web visitors behaviours of tending to "stay for a long time and to return (para. 1). Lin (2007) defined stickiness as "the users' willingness to return to and prolong his/her duration of stay on a website" and it measures the ability of websites "to draw and retain web users to keep revisiting the websites" (pp. 507-508).

Stickiness is measureable through quantitative data sources which assess the "form of frequency of visits, number of unique visitors, and length of time on the site" or anything about a website or a webpage that can encourage a visitor to visit more frequently and stay longer (Rouse, 2009). Many recent studies focus on how to understand the web users' intention to keep revisiting a website "since it is believed that web users' willingness to return is a strong indicator of web users' loyalty" (Lin, 2007, p. 508). Therefore many profitable companies make considerable efforts to keep web users stay on the websites as long as possible, and as a result, Web users become much stickier to the websites and their staying duration is prolonged greatly.

However, research also shows that it is not easy to make a “good” website that will “unquestionably influence customer’s willingness to stick with it” (Lin, 2007, p. 508). According to Lin (2007), there are several factors that might influence the web users’ stickiness: (a) users’ perception of the website value, (b) users’ positive attitude towards a website, and (c) the trust toward the website. These factors are all “psychological status” (Lin, 2007, p. 508) and all represent the users’ willingness. Meanwhile, they all rely on the information that the websites provide (which is called “content”), the format of the website (which refers to how user-friendly the website is), and website operation (how easy the site is to access).

Saha and Grover (2011) briefly explained the linkage among *User Experience*, stickiness, contributive web users, and Web 2.0. First of all, they argued that “a great user experience plays a vital role in making users come back again to the web service” and “Web 2.0 services are highly dynamic and proactive due to users’ contribution and active participation towards its contents” (p. 16). Secondly, they emphasized that millions of users’ contributions eventually lead the website to attain a state of higher relevance. Thirdly, they pointed out that collaboration is an important process of extracting useful content from a content provider website and displaying it on some other website. The content being regularly checked and updated by concerned users or content providers, the information provided is of good quality; Wikipedia is a good example of collaboration (Saha & Grover, 2011).

Alben (1996) suggested criteria for designing effective interaction and summarizes the features of websites that can provide people with a successful and satisfying experience. According to him, these qualities include understanding of users,

effective design process, and content that is needed, learnable and usable, appropriate, aesthetically pleasing, mutable, and manageable.

Summary

A review of the literature related to the parent–school relationship revealed the following features of successful and effective parent–school interaction. Successful and effective parent–school interaction should meet parents’ requirements of improving children’s personal development. Parents always have expectations of their children's academic achievement and they always believe that it is their responsibility to take the primary responsibility for children’s educational achievement, as well as share responsibility and the common goals with teachers to help their children to achieve most efficiently and effectively

Another feature of successful and effective parent–school interaction is for the school boards to provide significant opportunities for parents to contribute meaningfully to school decisions so that they affect learning. Parents feel comfortable when the school provides a welcoming, friendly, and inviting atmosphere and implement useful strategies to enhance parent–school relationship (Graham-Clay, 2005; Huseth, 2001; McKenna & Willms, 1998; Parent Involvement Committee, 2012).

Social networking among parents and communities is helpful for providing and sharing information either from schools or from communities. Such a connection can help parents to understand some difficult situations and handle them successfully (Brien & Stelmach, 2009; Hill & Taylor, 2004).

Successful and effective parent-school relationships can stimulate parents’ desire to be actively engaged. The desire of parents who are willing to be involved in their

children's education experience is a very significant component of effective parent–school relationships; however it is true that not all parents acquire enough knowledge and strategies to do so. From parents' perspectives, a successful and effective parent–school interaction does not refer to serving the school when being asked or expected to do so by the school administrators. Parent–school interaction should involve authority being shared by educators and parents, where decisions are mutually determined and mutually beneficial (Carter, 2002; Gianzero, 1999; Pushor, 2007).

The literature on parent–school communication also highlights two categories for describing the relationship: progress and attitudes. Progress in parent–school communication refers to the degree to which there is active communication by the parent with the school. These three degrees described in the literature are: parental participation, parental involvement, and parental engagement.

In terms of attitudes, parents may exhibit passive and active attitudes. A combination of the progress stages and attitudes suggest that there are six possible dimensions or types of parents–school communication, namely: passive parental participation; passive parental involvement; passive parental engagement; active parental participation; active parental involvement; and active parental engagement. Ideally, active parental engagement is the best way for enhancing students' outcomes. Hence, how school boards can encourage parents to adopt active parental engagement is significant.

The literature review shows that effective design of websites is crucial to keep users online. Web 2.0 technology has a number of features that promote its use in developing parent–school relationships. The most noted advantages of Web 2.0 features

that offer opportunities for interaction among users and website creators are through online information sharing and online social networking for communication tools such as email, Facebook, voice and video communications, chat rooms, instant messaging, online forums, online discussion lists, online news feeds, and microblogs (e.g., Twitter). These design features on school-board websites will promote parents as web users to acquire better user experiences. Parents' satisfaction with their user experiences will improve their stickiness on the school boards' websites, which means they will spend more time on these websites and thus contribute to and benefit more from the websites. Stickiness results from features of a web site that encourage a visitor to stay longer. A website is considered sticky if it offers rich interactive experiences and it makes a visitor tend to stay for a long time and to return. Positive contribution and benefits will enhance parent–school relationships as well as stimulate parents' desire to be actively engaged.

Ultimately, this paper is trying to build a concept of a Web 2.0-based interactive platform for encouraging active parental engagement so that parent–school communication can be enhanced.

CHAPTER THREE: FRAMEWORK AND METHODS

In this study, technological approaches were emphasized and adopted to enhance active parental engagement in order to establish an effective way of communication for parents and schools in Ontario. The study conducted a conceptual analysis of the features and abilities of Web 2.0 technologies, and proposed a conceptual framework of criteria and features for designing Web 2.0-based websites as interactive platforms that enhance parent–school communication in the Ontario context. Also, this framework was used to analyze the websites of two school boards in Ontario to examine their application of Web 2.0 technologies as social interaction instruments for parent–school relationships. In this chapter, I briefly introduce the approach of conceptual analysis that I used to understand the main constructs of effective parent–school relationships and Web 2.0, the specific process I undertook to develop the conceptual framework of the features of a successful Web 2.0 website for the purpose of interaction, how I applied the framework to analyze three samples of school boards/schools’ websites in Ontario area, and how I developed the criteria to assess parents’ experiences as users.

Method of Conceptual Analysis

This project adopted conceptual analysis as the methodology. Furner (2004) defined conceptual analysis as:

a technique that treats concepts as classes of objects, events, properties, or relationships. The technique involves precisely defining the meaning of a given concept by identifying and specifying the conditions under which any entity or phenomenon is (or could be) classified under the concept in question. (p. 233)

The goal is to break down concepts/ideas into subcategories and understand the relationships among them to get a better understanding of the concepts and relationships among concepts. I began the conceptual analysis with a broad examination of the literature to identify the conditions and sub-ideas related to the two concepts: effective parent–school relationship, and Web 2.0 websites for the purpose of social interaction. To clarify these concepts, I immersed myself in various journals and works that related to Web technology and parent–school relationship. In subsequent readings, I established the connection among multiple sub-concepts such as the notion of user experiences, stickiness, social interaction, and types of parent–school communication. Then, I analyzed the logical relationship between the application of Web 2.0 technology in the education domain and parent–school relationship and presented these relationships in Chapter 2.

Thereafter, I identified the conditions necessary for using a Web 2.0-based interactive platform and developed a framework of criteria to analyze and design a parent–school communication tool for application within the present educational context of Ontario. Specifically, I established the criteria to evaluate whether a certain website is adapting the application of Web 2.0 technology to users' interactive experiences in order to strengthen the relationship between users and website creators. This framework is presented in below.

Rationale to Establish the Framework

In the context of this project, parents can be considered as users. Here I define users as a group of individuals who use the web services offered by the website creators, which are school boards. The function of using the web as a tool for communicating with

parents is twofold. For one thing, it is a positive method for school boards to establish effective communication with parents. For another thing, parents can be involved actively. Therefore, to achieve this purpose, parents' experiences and the degree of how they are satisfied with the web services is very important. Hence, one of the ways to encourage active parental engagement is by using websites and empowering their online stickiness. Furthermore, users' online stickiness relies on the user experiences and the degree of satisfaction in the online services; and one of the most significant factors that influence good user experiences and high degree of satisfaction is the interactivity of the website.

Features of Web 2.0 Website for the Purpose of Interaction

In chapter 2, I summarized the features of Web 2.0-based websites. According to the literature, the main features of successful Web 2.0-based websites are generalized in the literature as: (a) a platform for applications and information sharing; (b) generally user-oriented as a tool for social interaction and collaboration; and (c) as communication tool. Take those online business websites like Facebook or Amazon as examples; at the Facebook and Amazon websites, users are the core of the websites and all the online activities are undertaken to satisfy users. At the latter websites, users create and share information, as well as communicate with each other. Given that the websites of school and school boards are the providers of educational services and the parents are the users, the degree to which the parents are engaged can be shown by their online behaviour. I therefore identified features of Web 2.0 as outlined in the literature review that would increase parent interaction on websites. The literature suggests Web 2.0 features that encourage social interaction and user collaboration and enhance stickiness are social

networking features (e.g. Facebook), voice and video communications, chat rooms, instant messaging, online forums, online discussion lists, online news feeds, and microblogs (e.g., Twitter).

Table 1 provides a framework of Web 2.0 features that promote interaction in terms of the degree of social interaction they promote. For example, a low level of interactivity is characterized by features such as email and newsletters which are mainly used to communicate information to parents. A high level of interactivity on websites is characterized by features such as social networking and blogging tools (e.g., Facebook and Twitter) that promote synchronous and asynchronous communication and social interactions among parents and between parents and schools.

Criteria to Assess Parents' Experiences as Users

Aside from the framework of Web 2.0 features, some specific questions should also be considered when examining the websites. These questions are related to user experiences from parents' perspectives. From this perspective, these questions are:

- How do parents feel about these websites when they are using the website as both users and parents?
- Are they satisfied with the school boards' websites?
- Do these websites care about parents' feelings when they experience the websites, so parents' interest can actively engage?

Since this study is limited to analyzing the external features of websites to assess their ability to promote social interaction, other criteria are required that assess the websites for ways in which websites are designed to cater to the needs of users (in this case users refers to parents).

Table 1

Features of a Successful Web 2.0 Website for the Purpose of Interaction

Level	Features	Description
Lower level of interactivity	Email access	Have access to email to a certain people
	Newsletter	A regularly distributed electronic publication that sent via email or posted on webpage
	External link	Hyperlinks that redirect the websites to any domain other than the domain the link exists on (source)
	RSS	A publish format that allows user to quickly access frequently updated content from the websites with convenience, such as entries, news headlines, audio, and videos. It is usually illustrated by an orange logo with the three curved bars.
	Comments	Users make comments based on the posted contents
	Share button	Users have the right to share internal or external resources
Medium level of interactivity	Instant message	Users have the access to talk with other uses or even the web administrators directly
	Polls	Users have access to make polls on a certain topic
	Ranking	Users have access to rank a certain service
	Chat room	An access that allows users to have real-time online chat and virtual interaction with other
	Social networking	Users have access to make friends and have social connection with other users
High level of interactivity	Blog	Users have access to post blogs, as well as read and make comments on other users' blog
	Forum	Users have access to establish a discuss group as well as response about a certain topic
	Micro Blog	Users have access to post short blog as well as read and make comments on other users' blog

Alben (1996) addressed the criteria for designing effective interaction of websites so that users have successful and satisfying experiences. The criteria were: understanding of users, effective design process, needed, learnable and usable, appropriate, aesthetically pleasing, mutable, and manageable. Prilla and Ritterskamp (2008) also suggested that user experiences were enhanced by websites that included three aspects: very simple usage, immediate feedback and structural level, and valuing each user's contributions.

For the purpose of my study, I derived criteria to evaluate if the schools' websites provide successful and satisfying experiences for parents by drawing on the literature on user experiences mentioned above and adapting them for the purposes of parent-school communication. The criteria included: (a) understanding parents' needs, (b) learnable and usable, (c) valuing parents contributions, and (d) immediate feedback to parents.

The notion of "understanding of users" refers to how well the school boards as website creators understand the parents' needs. For example, since literature indicates that parents' needs are largely related to their children's academic achievements, the criteria for assessing whether the school board understands the parents denotes that in order to respond to parents' needs of establishing social networking with other parents, school boards should provide a platform for them. The notion of "learnable and usable" refers to whether the websites are easy to navigate and use. To be specific, how well does the website support and allow for the different ways parents will approach and use it, "considering their various levels of experience, skills and strategies for problem solving" (Alben, 1996, p. 15). The notion of "valuing parents' contributions" refers to considering all aspects of parents' interaction as users with the school boards' websites and enabling their experiences to allow for more and better possible interaction (Scapin et al. 2012).

The notion of “immediate feedback to parents” refers to a convenient way for parents to receive feedback from schools and school boards.

Application of Conceptual Framework

I selected three school boards, which are: District School Board of Niagara (DSBN), Ottawa-Carleton District School Board (OCDSB), and Toronto District School Board (TDSB). The websites were analyzed based on two main concepts: the application of Web 2.0 and the parents’ experiences as web users. Findings will be presented graphically with tables as well as discussed.

Criteria for Selecting the School Boards

Criteria for selecting the school boards were based on the size of the school district. Based on data posted on the websites, I picked three of the largest school boards in Ontario. According to its website, the DSBN

operates 95 elementary schools and 20 secondary schools in the 12 municipalities that make up the Niagara Region. We are proud to serve over 38,000 students (24,600 elementary and 14,850 secondary) each year. The DSBN is governed by a Board of 11 elected trustees. (DSBN, 2013, para.7)

The OCDSB’s website indicates the board is “the largest school board in Eastern Ontario serving students within a 2,760 square kilometer area known as the city of Ottawa” and “the seventh largest board by school population in the province of Ontario”; its students “are based out of 147 schools—116 elementary including two special education sites, 26 secondary including the Adult High School, and 5 secondary alternate sites” (OCDSB, n.d., para. 4).

Table 2

Criteria for Enhanced Parents' Experiences on School Board Websites

Criteria	Key questions for website analysis of user experiences
Understanding parents needs	Do the school board websites understand parents' needs? Do the school board websites support parents to assist students' learning so that parents can get positive experiences of meeting their expectation of their children's academic achievement as well as improving children's personal development by using the websites? For example, there should be an access for parents to know what their children learn at school and how the teachers instruct their children. Parents should have access to teachers' teaching contents like PowerPoint or other presentations posted online so they can assist their children.
Learnable and usable	Are the websites easy to navigate and use? For example, is the webpage simple with a toolbar with clear links? Is the language used suitable for parents to understand? Do school boards consider whether parents are new immigrants to Canada or whether they are English as the second language speakers and offer some tools like Google Translation tools to make the website easy to use?
Valuing parents' contributions	Are the websites helpful to establish linkage or social networking between school boards and parents as well as the community? For example, do parents have access to communicate with other parents by online applications such parent discussion forums or blogs? Do the websites provide access for parents to post feedback on the contents of the website?
Immediate feedback to parents	Do websites enable parents to get immediate responses to their feedback? For example, parents provide feedback and get responses through instant messaging.

The TDSB it is the “largest school Board in Canada and one of the largest in North America. We have nearly 600 schools and serve more than 250,000 students each year” (TDSB, 2013, para. 1). Overall, among the three schools, there is access for parents in the homepage of each of their websites. Three of them use “parents” as the name of the button and one is using “for parents.” No matter what terms they are using, it is clear that the parents are led to the webpage for parents.

Before evaluating the websites of the school boards, I assumed that one of the purposes for school boards developing such websites is to make parents involved. The reason that I made this assumption is because all the websites of the school boards provide access to parents.

Procedures for Analysis of Websites

The analysis for the school board websites included the following procedures:

- I reviewed all of the websites of the school boards in Ontario.
- Among the websites, I selected those for three school boards in Ontario and examined the webpages for parents using the criteria I had developed. Each website was analyzed for the presence or absence of criteria and the degree to which it promoted active parent engagement.
- I used the *Features of a Successful Web 2.0 Website for the Purpose of Interaction and Criteria for Enhanced Parents’ Experience on School Board Websites* framework to evaluate the websites I selected. The purpose was to examine whether the websites have the features of Web 2.0 promoting social interaction.

Chapter 4 summarizes the results of the analysis of the school boards websites.

Table 3

Basic Information of the Three School Boards

Board	Website	Designation	No. of schools	No. of students
District School Board of Niagara (DSBN)	www.dsbn.edu.on.ca	Largest school board in Eastern Ontario	115	38,000
Ottawa-Carleton District School Board (OCDSB)	www.ocdsb.ca/ab-ocdsb	Seventh largest board by school population in Ontario	147	Over 73,000
Toronto District School Board (TDSB)	www.tdsb.on.ca	Largest school board in Canada and one of the largest in North America	Nearly 600	250,000

CHAPTER FOUR: RESULTS

In this chapter, I present the results of the analysis of three school board websites in Ontario to assess the degree to which the websites promoted parent–school engagement and communication. I analyzed the selected websites with the framework, *Features of a Successful Web 2.0 Website for the Purpose of Interaction* and *Criteria for Enhanced Parents' Experience on School Board Websites* developed in the previous chapter. Some snapshots of the existing features on the school board websites are provided in the appendices to support my interpretations.

Application of Framework of Web 2.0 Features in the School Boards' Websites

In this section I present the results of the analysis of how the school board websites used Web 2.0 features for promoting interaction with parents. For each school board, I used the criteria from the *Features of a Successful Web 2.0 Website for the Purpose of Interaction* to interpret the degree to which the websites showed evidence of low, medium, and high level of interaction.

District School Board of Niagara (DSBN)

The DSBN website was first analyzed for features promoting low levels of interaction. There was email access for the purpose of contact with all the schools or the related departments of the school boards. There was also a message system for users to leave messages. This was important because according to my research, email access did not work when the user's device had no default email system like Microsoft Outlook. Therefore the message system was helpful for communication. There were also newsletters released. The title of the newsletter is shown and when clicked, it presented the PDF version, which was easy for reading and saving. There were also external links

on the website, such as the link to the EQAO site as shown in Table 4 and as shown in Appendix B. An RSS Feed button was shown on the homepage. However, compared to the website of OCDSB, the RSS icon on the DSBN website was relatively small and there was no instruction for using RSS Feed. Therefore if the users had no RSS Feed Reader, they would not have been able to experience RSS. These features were evidence of low levels of interactivity.

With regard to medium level of interactivity (see Table 5), the DSBN website partly had the function of making comments. Owing to the fact that most of the contents were posted as static webpages or documents, there was hardly any access to comments. However, several webpages were linked to Facebook which allowed users to follow or “like.” The static files and most of the webpages were not available for sharing and only a few pages were available to be shared in multiple ways by the Share button. The other four features of medium level interactivity (Instant Message, Polls, Ranking, and Chat room) were not shown on the DSBN website. There were very few or no features on the website that matched the features for high levels of interaction (see Table 8). The feature of social networking largely relied on external social networking tools like Facebook or Twitter to establish their social networking system. And there was no access for users to set blogs or enter a chat room to have online communication.

Ottawa-Carleton District School Board (OCDSB)

The website of the OCDSB school board basically implemented features of the lower level of interactivity. There was email access for the purpose of contact with all the schools or the related departments of the school boards. However, the email access was largely directed to the email address or Communications and Information Services.

Table 4

Application of Web 2.0 Features in District School Board of Niagara Website

	Lower level of interactivity
Email access	There is email access for parents to contact with all the schools directly, as well as the related departments of the school boards. Users can also fill in the contact form to leave messages.
Newsletter	There is a particular section “Newsroom” that offers a collection of useful information including news releases and background documents to help parents get resources for up-to-date news and information from around Niagara. The information is presented as individual only-read PDF files. Readers don’t have any access to make comments.
External link	In the “Parent” section, DSBN has an external link that links to EQAO http://www.eqao.com/ . There is also a Facebook button and Twitter Button on the top of the home page. When clicked the link, it will direct to the Facebook or twitter page of the school board.
RSS	There is RSS Feed button on the homepage.

Users of the OCDSB website can also download schools and staff directory for getting the email address. This directory, however, was text-based thus it is not accessible for direct interaction via email. Users can also choose to join the constant contact system by entering their email address to sign up for OCDSB's mailing list. Once registered successfully, users will receive emails from OCDSB. Unlike DSBN, there is no message-leaving system for users to leave a message. Consequently, if the user's device does not have the default email system like Microsoft Outlook, the email access will not work. There are also newsletters released on the website of OCDSB. Compared to the website of DSBN, the news of OCDSB is released as read-only static web pages in the Media section. Readers or users don't have any access to make any comments. There are also external links on the website, such as the link to the Ottawa Network for Education site. An RSS feed button is shown on the homepage. The icon of the RSS is very noticeable (as shown in Appendix C and Appendix D). More importantly, there is instruction for using RSS Feed. Therefore, if the users have no knowledge about RSS Feed Reader, they will get information from the instruction, which makes using RSS Feed easier. These features were evidence of low levels of interactivity.

With regard to medium level of interactivity (see Table 5), the OCDSB website did not have the function of making comments on the contents. Owing to most of the contents being posted as static webpages or documents, there was no provision to make comments. For the feature of Sharing, the static files and most of the webpages were not available for sharing and only a few pages were available to be shared in multiple ways by the Share button. The other four features of medium level interactivity (Instant Message, Polls, Ranking, and Chat room) are not shown on the website of OCDSB.

There were very few or no features on the website related to of high levels of interactivity (as shown in Table 8). The feature of Social networking largely relied on external social networking tools like Facebook or Twitter to establish their social networking system. And there was no access for users to set blogs or enter a chat room to have online communication.

Toronto District School Board (TDSB)

The TBSB website has changed considerably since I completed my research, and analysis is still based on my previous examination. Similar to the other two school boards' websites, the TDSB website also contained features of lower level of interactivity (see Table 6). There is email access for users to contact the TDSB head office. Parents can easily have email access to anyone in the school boards. Similarly to DSBN, the TDSB website also has a messaging system, presented as a contact form; the email access will still work if the user's device does not have default email system like Microsoft Outlook.

The TDSB website also includes newsletters. Unlike the other two websites, the TDSB news is shown in the "Media" instead of the "Parent" section and it is released as only-read web pages in Media section with links. Readers don't have any way to make comments. In the "Parent" section, there is no external link; all the links direct to internal webpages. However, there is Facebook button, Twitter Button, and YouTube. Clicking on these buttons directs the user to the Facebook or Twitter page of the school board. There is an RSS Feed button on the homepage as well and, similar to the DSBN website rather than OCDSB's, the RSS icon is relatively small and there is no instruction for using RSS Feed. Therefore if the users have no RSS Feed Reader, they will not be able to experience RSS. These features were evidence of low levels of interactivity.

Table 5

Application of Web 2.0 Features in the Ottawa-Carleton District School Board Website

	Lower level of interactivity
Email access	There is an email link that link to Communications and Information Services. However it is on the “Contact us” section instead of in the “Parent” Section. There is NO email access in the “Parents” section. However, there is another email system for the school board to communicate with parents
Newsletter	The news of OCDSB released as only-read static web page in Media section annually. Readers don’t have any access to make any comments.
External link	In the “Parent” section, there is no external link. All the links direct to internal webpages. However, there is Facebook button, Twitter Button, LinkedIn, YouTube. When click these buttons, they will direct to the Facebook or twitter page of the school board. On the website it also shows how to get iPhone application in Apple Store.
RSS	There is RSS Feed button on the homepage and it is listed with other external link button.

There are also newsletters released on the website of TDSB. Unlike the other two websites, the news of TDSB is shown in the “Media” section instead of the “Parent” section and it is released as only-read web pages in Media section with links. Readers don’t have any way to make comments. In the “Parent” section, there is no external link. All the links direct to internal webpages. However, there is Facebook button, Twitter Button, and YouTube. When you click these buttons, they will direct you to the Facebook or twitter page of the school board. There is RSS Feed button on the homepage as well and, similar as the website of DSBN rather than OCDSB, the icon of RSS is relatively small and there is no instruction for using RSS Feed. Therefore if the users have no RSS Feed Reader, they will not be able to experience RSS. These features were evidence of low levels of interactivity.

With regard to medium level of interactivity (see Table 7), the TDSB website did not have the function of making comments on the contents. Owing to the fact that most of the contents were posted as static webpages or documents, there was hardly any access to comments. For the feature of sharing, the static files and most of the webpages were not available for sharing; only a few pages were available to be shared in multiple ways by the Share button. The other four features of medium level interactivity, Instant Message, Polls, Ranking, and Chat room, are not shown on the website of TDSB.

There were very few or no features on the website of high levels of interactivity as shown in Table 8. The feature of Social networking largely relied on external social networking tools like Facebook or Twitter to establish their social networking system. And there was no access for users to set blogs or enter chat room to have online communication.

Table 6

Application of Web 2.0 Features in the Toronto District School Board Websites

Lower level of interactivity	
Email address	There is email access for users to contact with TDSB Headquarters. Parents can easily to have the email access to any one in school boards. There is also a contact form for users to leave their names, email address and messages, questions, even any concern.
Newsletter	The news of TDSB is not shown in the “Media” section instead of the “Parent” section and it is released as only-read web pages in Media section with links. Readers don’t have any access to make comments.
External link	In the “Parent” section, there is no external link. All the links direct to internal webpages. However, there is Facebook button, Twitter Button, and YouTube. When click these buttons, they will direct to the Facebook or twitter page of the school board.
RSS	There is RSS Feed button on the homepage

Table 7

Medium Level of Interactivity of Web 2.0 Features in the Three Websites

Features	Medium level of interactivity		
	School board		
	DSBN	OCDSB	TDSB
Comments	The contents posted are largely static webpages or documents which don't have the access to make comments. Several webpages are linked to Facebook which allow user to follow.	The contents posted are largely static webpages or documents which don't have the access to make comments.	The contents posted are largely static webpages or documents which don't have the access to make comments.
Sharing	The static files and most of the webpages are not available for sharing. Only a few pages are available to be shared by the share button. It can be shared in multiple ways like print or via email.	The static files and most of the webpages are not available for sharing. All the static PDF or Word documents can be saved directly.	The static files and most of the webpages are not available for sharing. All the static PDF or Word documents can be saved directly.
Instant Message	None of them have web-based instant message system.		
Polls	None of them have access to the make polls on a certain topic service.		
Ranking	None of them have access to rank a certain topic or service.		
Chat room	None of these school boards has designed the function of Chat room as a communication tools.		

Table 8

Higher Level of Interactivity of Web 2.0 Features in the Three Websites

Features	High level of interactivity		
	School board		
	DSBN	OCDSB	TDSB
Social networking	All the websites rely on external social networking tools like Facebook or Twitter to establish their social networking system.		
Blog	There is no access for parents to create their own blog as a user so that they can share information with other users.		
Forum	None of the school boards have access to build a semi-open forum for establishing discussion groups, online chatting room as well as response about a certain topic.		

Summary of Findings for Features of Web 2.0

The main findings of the current use of the three school boards to use Web 2.0 technologies as a communication instrument in the selected websites of the school boards in Ontario were:

- All the selected school boards use the websites for information delivery instead of sharing and interactive platform. What I found was the school boards have put great efforts on establishing the websites to serve as many people as possible who are involved, including teachers, students and parents. Considering parents diverse needs, school boards are meeting their need for information.
- Most of the school boards have the ability to provide lower level Web 2.0 technologies as communication instruments, for example, email application. Anyone can email the school board without jumping off the website. Some school boards have the capacity for using medium level Web 2.0 technologies as communication instruments, for example, sharing information. But few of them demonstrated the capacity for using higher level Web 2.0 technologies as a communication instrument.
- All three school boards currently use offline methods of communication for parent–school relationship such as parents meetings or phone calls as well as some other activities. According to the announcements posted on the websites, school boards encourage parents to go and participate in the offline activities; specifically, the real meeting or face-to-face conversation instead of also using the Web 2.0 based instant message system like Skype or MSN for communication.

- All three school boards have Facebook and Twitter pages and the buttons are shown on the homepage which can help anyone who views the websites to jump to the schools' Facebook. What's more, if users have their own Facebook or twitter account, they can follow the school boards; make comments, and any other behaviors that are allowed in cyber worlds. However, it should be noted that Facebook or Twitter are mass media, which means all the information on them is open to the public. The web pages indicate that existing school boards rely on the external and public Web 2.0 services such as Facebook, Twitter, and YouTube as the most essential interactive ways with parents instead of using their own application

Analysis of Parents' Experiences as Users

Successful and effective parent–school relationships rely on parents' desire to engage with the school board, therefore an important issue for school boards to solve is how to arouse and stimulate parents' desire so they have more impetus to participate in their children's education. In chapter 3, I developed criteria to assess user experiences to arouse and stimulate parents' desire to remain on websites. The following section shows the results of the analysis of parents' experiences as users within the school boards I examined.

DSBN

Understanding parents' needs. DSBN offers several webpages of different programs like Alternative Education Program Guide and Directory, Cooperative Education, ESL program, and so on. Also, it offers a webpage for eLearning programs which provides students with additional online courses, Ontario Educational Resource

Bank, and Homework Help. According to the web page, “the course teachers will provide assessment opportunities and feedback in a timely manner as they monitor student progress in the course by regular interaction with each student” (DSBN, 2013, para. 1); and “through the DSBN’s Homework Help network, students can get free, real-time math tutoring by certified Ontario teachers” (DSBN, 2013, para.1). Among all the webpages that can help students’ learning, only one webpage offers interactive features and others basically post information that is updated as needed. There are multiple resources or information on programs to meet parent’s diverse needs. For example, information on Adult and Community Education, welcome information for parents who are newcomers, and information for parents who have special needs children are available.

Learnable and usable. According to the content on the DSBN website, the webpages provide a welcoming, friendly, and inviting atmosphere for parents. The design of the DSBN website was simple and clear (see Appendices A and B). Such simple and clear designing is easy for parents to navigate and find the links or resources they need. The website also had a search tool bar which makes parents have quick access to the information they need. There are no language options for parents to choose. Therefore there might be challenges for parents who are English as the second language speakers to navigate the website. For some features like RSS Feed, there is no corresponding instruction, which makes parents feel challenged when they are not sure about how to use such an application. These challenges may result in parents failing to obtain good user experiences.

Valuing parents contributions. I examined the website of DSBN to see whether it supported the establishing of social connections. As I stated in the previous analysis,

DSBN has linked with external social networking tools like Facebook and Twitter. Through the Facebook and Twitter link, parents can have access for establishing linkage or social networking with school boards as well as interact with school boards. Via Facebook or Twitter link, parents who already have a Facebook account can follow or “like” the school board based on the content school boards post. More importantly, parents can make comments. However, parents don’t have any access to establishing online social networking with other parents. There is no access for the parents to communicate, discuss or send messages or even emails to each other. Consequently, parents’ contribution largely relies on whether they can access other parents and the school board by Facebook and Twitter account. For those parents who do not have Facebook and Twitter account, their contribution is not being valued and the user experiences may not be positive.

Immediate feedback to parents. The website of DSBN does not provide access for parents to post feedback on the contents of the website; neither does it enable them to get immediate responses. When parents adopt the email system or message system, it is not quite guaranteed that they can get responses from the persons they write to. Also, it cannot be guaranteed that their voice could be heard. Such non-instant communication may minimise parents’ positive user experiences.

OCDSB

Understanding parents’ needs. There is a hyperlink leading to the website of a free online tutoring service which is available to all students in secondary school. Parents can help their children do homework when they are not sure about the answers. This website offers certified teachers in multiple subjects like Math, English, and Science and

these teachers are available for one-on-one confidential, online help most of the time during the week. The function of this website is providing information so that parents can easily get access to the professional homework help website. Once parents know there is a professional website that can assist students in doing homework, according to general Internet use habits, they usually launch the professional websites directly instead of launching the school board's website. They then jump to the professional website. The website of OCDSB also offers links to the website of Grades 3 and 6 EQAO testing. When parents click the hyperlink, they go to the Education Quality and Assessment. Parents actually do not have to stay on the website of OCDSB for a long time; they even do not have to launch this website very frequently. The way the website is constructed (links to other resources), would seem to drive users to leave the OCDSB site thereby reducing stickiness. However, this way of website design is also effective to encourage parents to stay on the website because they only need to log on the website of OCDSB rather than remembering a great number of other website domains.

Learnable and usable. The web page of the “Parents” section of OCDSB's website is a very clear design. Parents can easily find the information they need to support their child in learning such as finding a school, registration information for school or a specialized program, finding an extended day program, information on how to get involved in children's' learning, and the school council. All the related items are listed on the left sidebar in a clear understandable way (see Appendix D). More importantly, as mentioned previously, there is instruction for some applications like RSS Feed and iPhone App. Therefore if the users have no knowledge about RSS Feed Reader

or iPhone App, they will get information from the instruction, which makes using RSS Feed and iPhone App easier.

Valuing parents' contributions. I examined the website of OCDSB as to whether it provided access to establishing social connections. As I stated in the analysis in the previous section, OCDSB has linked with external social networking tools like Facebook and Twitter. Compared to the other two websites that I examined, OCDSB has more external social networking applications than the other two school boards. According to the website, OCSB have five social networking applications. Similar to the issues that other two websites have, the contributions of parents who do not have Facebook and Twitter account is not being valued and the user experiences may not be positive. Meanwhile, OCDSB has a "mailing list" system which may help enhance parent-school relationship. Users can choose to join their constant contact system by entering users' email address to sign up for OCDSB's mailing list. Once registered successfully, users will receive emails from OCDSB constantly. However, this system can only ensure parents hear from school instead of parents' voice being heard.

Immediate feedback to parents. Likewise, the website of OCDSB does not provide access for parents to post feedback on the contents of the website; neither does it enable them to get immediate responses. When parents adopt the email system or message system, it is not quite guaranteed that they can get responses from the persons they write to. It cannot be guaranteed that their voice could be heard. Such non-instant communication may fail to bring parents positive user experiences.

TDSB

Understanding parents' needs. On the webpage of TDSB, parents were divided

into two groups, parents of elementary students and parents of secondary school students. The contents are distinguished based on the difference of the two groups. For the purpose of improving students' academic achievement, there is a link that leads to the webpage of homework. This webpage includes four items: (a) Homework Policy, (b) Homework Tips for Grades 1 to 8, (c) Homework Policy Translation in 13 Languages, and (d) Homework Roles. Homework Policy is a static online PDF document to introduce the homework policy of TDSB. Homework Tips for Grades 1 to 8 shows the contents of how to help children with their homework. The tips are presented as text, while there are extra links of resources which help parents to work with their children in homework. The extra links to the webpage lead to English and math learning activities for students in Grades 1 to 8. When parents click this link, it goes to a website that has a number of learning activities for English and Mathematics which were developed by the TDSB. Although all these online activities are available as PDF files, parents still can get useful information from these files.

Learnable and usable. Because the website was designed according to the students' age group, parents can easily get access to useful information based on their children's age (see Appendix E). The website also has a search tool bar which makes parents have quick access to the information they need. Also, considering the multi-cultural situation in the Toronto area, some webpages adopt multiple language options (see Appendix F). This makes navigating the website less challenging for parents who are English as the second language speakers.

Valuing parents contributions. TDSB is also linked to external social networking tools like Facebook and Twitter. Compared to the other two websites that I

examined, TDSB has less external social networking applications than the other two school boards. There are no features for the parents to communicate, discuss or send messages to each other. Therefore parents have a lesser chance to have social connections with other parents, which may minimize parents' collaborative contributions to education.

Immediate feedback to parents. Likewise, the website of TDSB does not provide access for parents to post feedback on the contents of the website; neither does it enable them to get immediate responses. When parents adopt the email system or message system, it is not quite guaranteed that they can get responses from the persons they write to, which may result in a lowering of parents' positive user experiences.

Summary of Main Findings of Parents' Experiences as Users

The main findings of parents' experiences as users were:

- All the websites evaluated in this project support parents as they assist students' learning in multiple ways. Some offer an internal resource system like the online library and some offer external access through links to other online learning assisting websites so that students can either have tutoring or have shared resources. Such features will bring parents positive experiences because this meets their expectation of supporting their children's academic achievement as well as improving children's personal development by using the websites.
- All the websites evaluated in this project show a welcoming, friendly, and inviting atmosphere as well as implement useful online strategies for supporting parents to be involved with the schools' activities besides teaching and learning. Even if it is not easy to evaluate how welcoming and inviting it is, it is obvious that the school

boards are considering parents' multiple needs and considering the diversity of the parents. For example some school boards have the particular information for parents who are new immigrants, or for parents who are non-English speakers.

According to the analysis of parents' experiences as users, three dominant findings emerged concerning parents' experiences as web users. These three themes were: (a) users' needs are satisfied; (b) websites are easy to access and use; and (c) there is need for social collaboration

Users' Needs Are Satisfied

As web users, the most basic needs of parents in using of the website of school boards are twofold: obtaining information and assistance, and involvement in their children's learning process. From this perspective, the evaluated schools all met parents' needs. All the three school boards have platforms parents can use to understand their children's learning, and more importantly, all the three schools post necessary information on the website. Therefore, theoretically, parents' needs are satisfied.

Easy to Access and Use

All of the school boards' websites reflect features of Web.1.0 technology; all the content is largely read-only webpages or static documents. Technically, the majority of parents would consider the sites to have easy access unless the parents have some idea of the differences between Web 1.0 and Web 2.0.

Need for Access to Social Collaboration Tools

Based on the analysis, parents as web users do not have the access to engage in social collaboration to contribute to education policy and practice. Their user experiences are built upon individual browsing without sufficient opportunity to have interactivity.

According to my findings, there is no external evidence on the websites that school boards provide parents with the opportunity to establish social connections with other parents or social networking between school boards and parents as well as the community.

CHAPTER FIVE: DISCUSSION

Education is not only about schools and school boards but also parents. Although considerable research shows the significance of enhancing parent–school relationships, there is little discussion about specific strategies of how to do this. In the current digital age, the power of using Web 2.0 as a tool to encourage people to stick on the websites to improve parent–school relationships would benefit students, their families, and schools (Center for the Study of Education Policy, 2004). My interest in this project was initiated after browsing many websites of the school and school boards in Ontario and finding that the websites lacked features promoting social interaction among parents, schools, and school boards via Web 2.0 applications. The purpose of this study was to explore the current use of technological approaches, especially Web 2.0 technology, to enhance active parent–school relationships in the Ontario context. The rationale for my study was prompted by the broad question: since considerable research and practice indicated Web 2.0 is an effective instrument that supports people in becoming involved in social interactions, how can school boards implement Web 2.0 to enhance parent–school relationships to benefit education?

This conceptual analysis was guided by three questions:

1. How is Web 2.0 technologies currently used for purposes of encouraging communication among users?
2. As a communication tool, how can Web 2.0 technologies enhance active parental engagement so as to establish an interactive way of communication for parents and schools in an Ontario context?

3. How are Ontario school boards currently using Web 2.0 technologies for parent–school board communication?

Summary of the Project

These questions above were addressed by reviewing the literature and conducting a conceptual analysis of two concepts: parent–school relationships and Web 2.0 technology for social interaction. The literature indicated that a Web 2.0 application can serve as effective communication tools to promote user-oriented Web 2.0 contents. As well, Web 2.0 technologies provide good user experiences because all the contents can be added, removed, revised, and reorganized by the users (in my project, parents). More importantly, Web 2.0 technologies offer the possibility for people to adopt it as an interactive platform for the enhancement of social life. Based on this conceptual analysis, I derived features of school board websites that could be used to engage parents through social interaction. As well, a framework of features of Web 2.0 promoting interaction was developed to assess the design of school board websites.

Finally, I reviewed and adapted criteria from the literature to evaluate whether the websites were providing satisfying experiences for users, specifically parents using the board web site. The *Features of a Successful Web 2.0 Website for the Purpose of Interaction* and *Criteria for Enhanced Parents' Experience on School Board Websites* were used to analyze three Ontario school board websites to find out how they used Web 2.0 technologies for communication with parents and the degree to which they promoted active parent-school engagement. A summary and discussion of the main findings is presented below.

Discussion of Findings

According to the literature (Alexander, 2006; Anderson, 2007; Arnott & Bridgewater, 2002; Cormode & Krishnamurthy, 2008; Graham, 2005; Kaplan & Heinlein, 2010; Phipps, 2007), Web 2.0 technology provides the features of: (a) a platform for applications and information sharing; (b) generally user-oriented as a tool for social interaction and collaboration; and (c) a communication tool .

The analysis of the websites of three school boards in Ontario shows that:

- The three websites can be considered as platforms for information. All the three websites offer various types of information for meeting parents' needs.
- The three websites partly offer access to practice Web 2.0 applications such as communication tools .The three websites all have the ability to implement lower level of interactivity including email access, newsletters, external link and RSS Feed. Among the features above, email is the most popular way of communication. Email is an effective way for communication; however it cannot be considered as a prompt way of interaction and it does not ensure just-in-time feedback.
- As to medium and higher level of interactivity, they lack features for just-in-time interactions where parents contribute to content and policy development with the school boards.
- Parents as web users do not have the ability to generate content for or contribute to the websites, which will have a negative influence on their user experiences so as to decrease their stickiness. Such user experiences decrease the desire for parents to stay on the websites and even browse the websites. The consequence

will be that parents get less and less information which decreases interaction with the school.

- According to the literature (Law et al., 2009; Scapin et al., 2012), the unavailability of adopting Web 2.0 for websites will make users have a limited desire to stay on websites. For the school board websites, the lack of Web 2.0 features suggests that one of the consequences of limited social interactions might be parents gradually decreasing the time on the school board websites and only being involved with school in face-to face ways. For example, when announcements are posted, currently there is no way for school boards to recognize whether the information has reached the parents, not to mention recognizing the parents' ideas or reactions.

Saha and Grover (2011) and Lin (2007) stressed the significance of good user experiences, which allows users have the desire of staying on the websites longer and more frequently, contributing more as well as benefiting more. As web users, parents' satisfied with user experiences will improve their stickiness on the websites of the school boards, which means they will spend more and longer time on these websites so they will contribute to school board issues and benefit more from the information on the websites.

As website creators, the school boards offer very basic services such as how to find the school via a map/directions posted on the Internet, which, to some extent, can be considered as understanding of the parents' needs. However, according to the literature, parents have more needs such as social needs, which cannot be satisfied by the existing websites. When evaluating the type of information parents need on a website, the criteria is to examine whether the websites make a significant social, economic, or educational

contribution. For this question, based on my analysis, the answer is positive. The evaluated three websites provide considerable information and resources that contribute to parent knowledge of education. Considering *the user experience* criteria of learnable and usable, there is no access for parents to have technological support for their levels of experience, skills, and strategies for technical problem solving. Therefore it is not possible for all the parents to use the websites as users. According to the literature, users who are exposed to a high percentage of good user experiences can be regarded as active users. In this study, parents who have good user experiences on the school websites can be regarded as actively engaging parents. Positive contribution and benefits enhance parent-school relationship as well as stimulate parents' desire to be actively engaged.

As stated in Iannetta's (2006) project, there are several barriers that may influence parents in their involvement with their children's education, including distance issues (the school may be far from their home), the time issue (parents might be working), and also personal experiences issues such as "parents don't feel welcomed at school" (p. 55). All these issues can possibly be solved by establishing a Web 2.0-based interactive platform. For example, given there is a Web 2.0-based interactive platform, parents do not have to worry about the distance and time issues because Internet access allows them to use the web services anytime and anywhere, which means parents can be involved in education all the time. The Web 2.0-based social networking may also makes parents feel very welcomed. All these strategies are very effective in simulating parental desire to engage in education, promoting active parent involvement.

Implications for Practice

Currently in Ontario, websites are widely used by the school boards. The findings indicated that the school boards have the ability to implement Web 2.0-based applications to improve the parent–school relationship. The analysis also showed that the school boards have increased understanding of the specific needs of parents. The analysis further indicates that there is still a gap in relation to communication and interaction between the school boards and the parents’ needs. School boards could use Web 2.0 tools much more effectively as a strategy for promoting effective parents–school communication. There is no doubt that face-to-face communication is a very important part of the relationship. However, boards could implement multiple ways of interacting with parents, not only by continuing to use traditional ways to interact with parents through telephone calls, voice mail, and parents’ meetings, but also by adopting Web 2.0 technologies to meet parent’s needs. Such changes could lead to increased interactions between parents and schools and parents and parents, and improve parents’ desire to be involved online. Some strategies that can be adapted for implementation are:

- Providing parents with opportunities to contribute to content development such as resources for other parents on the website. The webmaster should provide access to parents to post the content by themselves. Therefore these contents can be updated by users (parents) constantly and will encourage increasing number of parents to join in to create the content of the website, thereby improving their stickiness on the websites. When parents share more and gain more, they have more initiative for communicating with schools, and parent involvement will gradually develop to parental engagement.

- Those features of higher levels of Web 2.0-based application such as Blogs or Forums can be used to promote active parent–school engagement. As mentioned in the previous chapter, these features encourage parents to be stickier on the websites, thereby they will be willing to engage in their children’s education actively and voluntarily. For example, the feature of Sharing will allow parents to share the information they think useful with other parents. Likewise, the feature of Comments will allow parents to express their thoughts or ideas about any contents on the websites

These interactions will assist school boards with opportunities to hear parents’ voices. A Web 2.0-based Internet platform can be considered an effective strategy to prompt and stimulate parental desire to communicate with schools actively.

Although administrators and school board leaders have an awareness of the new technological applications, they are still implementing websites with features at the lower level, which does not strongly support the development of active parent-school relationships. Therefore some training programs should be established for administrators and school board leaders which develop knowledge about utilization of Web 2.0 technologies as a tool for serving education. I believe that administrators and school board leaders who are willing to adopt the Web 2.0 communication tools to communicate with parents will promote parent-school partnership to develop more successfully.

Recommendations for Future Studies

Ideally, the implementation of Web 2.0 applications should be based on research and data related to Web users. For future research, it would be of great value to create a website that applied all the Web 2.0 applications for parent–school relationship and

evaluate the effectiveness of this website by researching parents' experiences as users. Future research can use quantitative and qualitative methods to assess parents' experiences as web users. This would allow the researchers to have first-hand data to analyze web sites and make appropriate revisions based on users' needs. This project could be a collaborative effort with the school boards. In addition, continued research can be done to further develop the conceptual framework to evaluate how the Web 2.0-based websites influence the parent-school relationship.

However, my project is based on conceptual analysis rather than grounded research. Therefore some concepts need to be explored further and deeper by conducting practical research methodology. For example, the question, "How do parents feel about these websites when they are using the website as both users and parents" can be designed as qualitative research to collect more in-depth perspectives about the use of websites to meet parental information needs and desires for social interaction and community building. Likewise, the question in my project, "Are they satisfied with the websites of the school board?" and "Do these websites care about parents' feeling when they experience the websites so parents' desire can be stimulated of active engagement?" also can be designed as a specific data-collecting based research.

Conclusion

This conceptual analysis study resulted in the development of a conceptual framework of features of Web 2.0 and a framework of criteria of parents' experiences as users for developing parent school websites promoting social interaction. According to this project, it is clear that an "effective two-way school-home communication" based on Web 2.0 is very necessary for bettering parent-school relationship in the digital age

(Longfellow, 2004, p. 81). Therefore, to foster active parent–school engagement, school boards should take advantage of the features of Web 2.0 to develop parent–school websites

The idea of applying Web 2.0 as a platform to enhance parent–school relationship is not an easy project and it requires many factors, such as the co-operation and collaboration of the members of the school community, as well as the financial support from the education administrators and government.

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Appendix A

Snapshot of the Homepage of DSBN

DSBN DISTRICT SCHOOL BOARD OF NIAGARA

Home About DSBN Schools *students* Parents Community Careers Contact Newsroom Sky's the Limit

About DSBN
Quick Facts, Trustees, Director's Message

Schools
Regulate, Find a School, School Year Calendars

Students
Programs, Guidance, Special Education

Community
Welcome Centre, EFN, Accommodation, Reviews, Community Use of Schools, Support Your School

Have a safe and happy summer!

The DSBN Education Centre Summer Hours (July 8 - August 26)
Monday to Thursday, 8:30 a.m. to 4:30 p.m.

The Education Centre will be closed from Monday, July 22 to Monday, August 5.

Education Centre staff will resume regular operation on Monday, August 26.

If you need to contact someone regarding a DSBN school, please call the DSBN Education Centre at 905 641 1550.

EVENTS [Submit an Event](#)

3 Sep
8:00 AM
Welcome Back! It's the First Day of School
We hope everyone has had a safe and relaxing summer. September 3 marks the beginning of the brand new school year.
[Read More](#)

10 Oct
8:00 PM
Early Learning Conference 2013 - Day 1
<http://dsbn.org/earlylearning2013/>
OPTION 1 IN NIAGARA FALLS
The Sky's the Limit in Early Learning...
[Read More](#)

[More Events](#) [Submit an Event](#)

NEWS [RSS](#)

DSBN Budget Prioritizes Student Success
Posted Jun 25, 9:04 AM
Board budget includes enhancements to Full Day Kindergarten and French Immersion among other important investments.
[Read More](#)

Crossley Student Captures Gold with Electric Performance at National Skills Competitions
Posted Jun 14, 11:04 AM
DSBN technology students amongst the best in the nation.
[Read More](#)

Trustees Approve New High School in Fort Erie
Posted Jun 12, 9:22 AM
Decision will consolidate Fort Erie Secondary and Ridgeway Crystal Beach High School. Port Colborne High School remains unchanged.
[Read More](#)

DSBN Continues Renewal Process
Posted Jun 12, 9:14 AM

Appendix B

Snapshot of the “Parent” Main Page of DSBN

Parents

DSBN Resources and Services

- [Find a School](#)
- [Guidance and Career Education](#)
- [Parent Involvement Committee](#)
- [Scholarships/Awards](#)
- [School Sports](#)
- [School Support Services](#)
- [School Websites](#)
- [Environmental Sustainability at the DSBN](#)
- [Special Education](#)

Programs

- [Alternative Education Sites and Contact Information \(Directory and Guide\) \(PDF\)](#)
- [Alternative Programs](#)
- [Army Reserve Cooperative Program](#)
- [Community Education Services](#)
- [Lifetime Learning Guide](#)
- [Cooperative Education](#)
- [DSBN Learning](#)
- [Early Learning Program \(ELP\)](#)
- [ESL/ELQ](#)
- [French and International Languages](#)
- [Homework Help](#)
- [International Education](#)
- [Ontario Youth Apprenticeship Program \(OYAP\)](#)

Links

- [EQAO](#)
- [Welcome Centre](#)
- [DSBN Anthology 2011-2012](#)

Health and Safety

- [Live Safe, Work Smart Gr. 9-10](#)
- [Live Safe, Work Smart Gr. 11-12](#)
- [Germ Prevention Program](#)
- [Live Safe, Work Smart \(Co.op\)](#)

Appendix C

Snapshot of the Homepage of OCDSB

OTTAWA-CARLETON DISTRICT SCHOOL BOARD

School Locator Transportation Contact Us Stay Informed Careers

Search this site

Director's Update

About OCDSB Programs Schools Parents Students Community Media Staff Calendar

Upcoming Events

Capital Pride Parade
Sunday, August 25, 2013
First Day of School
Tuesday, September 3, 2013

Bus Delays

Check and see if there are any school bus delays today.

School Year Calendar

Mark your calendar with important dates including school PA days, holidays and more!

Registration

Everything you need to register your child in one of our schools.

News Releases

There is so much going on in our district and school communities!

OCDSB NEWS

District News

OCDSB Welcomes Back Students, Staff, Parents, and Community Partners
Tuesday, September 3, 2013

Register All Summer
While our schools are closed for the summer, you can register at the OCDSB Administration Building. Call 5 at Robert Bateman Public School. Admissions at 613-596-6730 to make an appointment.

2011-2012 Director's Annual Report to the Community
This report gives us the opportunity to reflect back on just a few of the amazing things happening in our District.

School News

Calling all Alumni
Merivale High School will be celebrating a 50th Anniversary Reunion in October 2014.

Robert Bateman Student is one of Canada's Youngest Writers
Congratulations to student Adoni Vassilyadi in Grade 5 at Robert Bateman Public School.

Congratulations Robert Bateman PS—An OUTSTANDING 2K walk for Cancer Research
Robert Bateman PS held its 14th annual 2K walk to raise money for Cancer Research.

Connect With Us

Facebook YouTube RSS Twitter LinkedIn

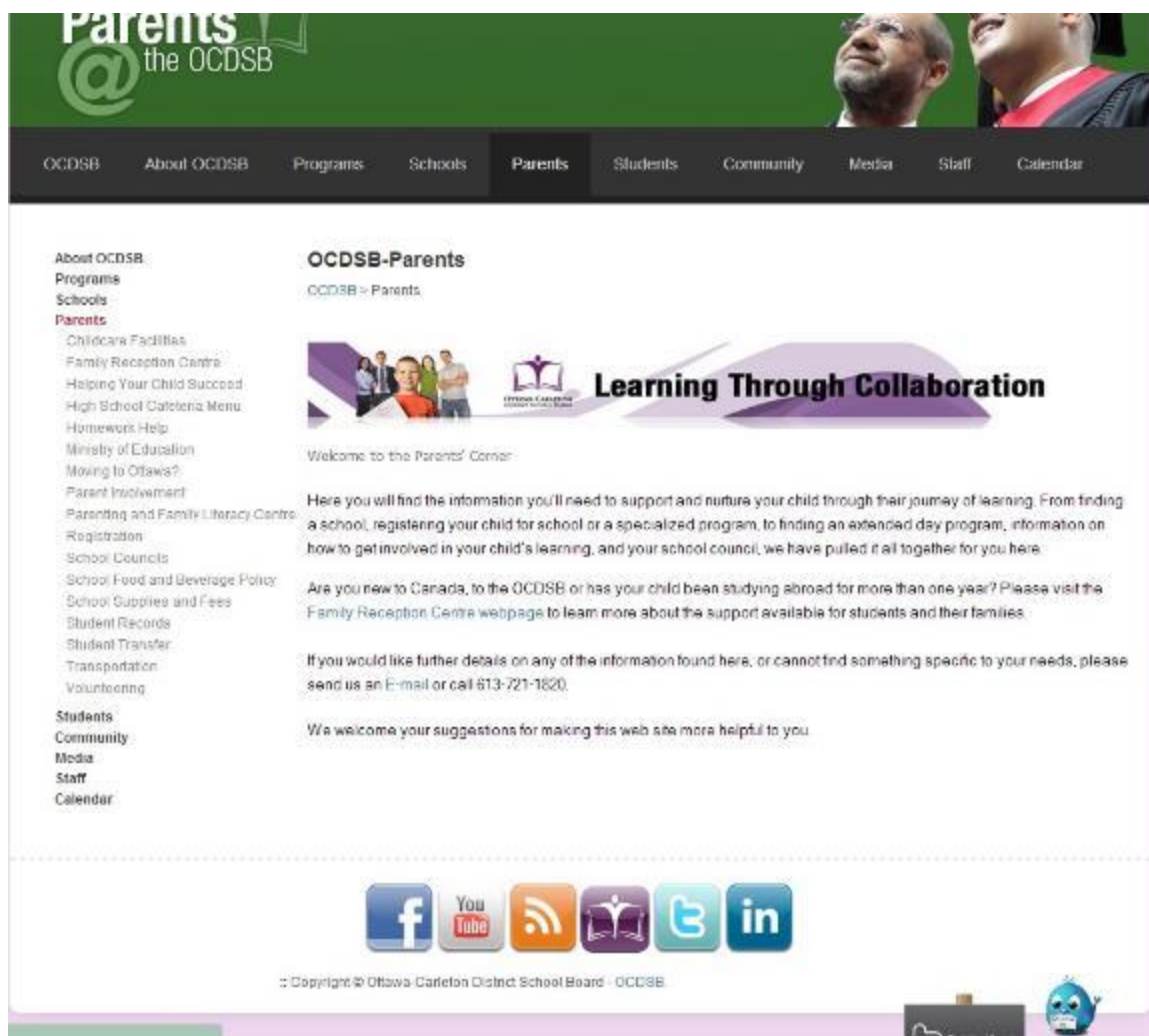
Mark Your Calendar

8/27/2013 7:30 PM	Special Board (In Camera)
9/3/2013 6:30 PM	Committee of the Whole (In Camera)
9/3/2013 7:30 PM	Committee of the Whole (Public)
9/9/2013 7:00 PM	Advisory Committee on Early Learning
9/11/2013 6:00 PM	Parent Involvement Committee
9/12/2013 7:00 PM	OCASC Secondary School Committee
9/17/2013 6:30 PM	Committee of the Whole (In Camera)

QUICK LINKS

Appendix D

Snapshot of the “Parent” Main Page of OCDSB



Appendix E

Snapshot of the “Parent” Main Page TDSB


Toronto District School Board

[STUDENTS](#)
[PARENTS](#)
[COMMUNITY](#)
[MEDIA](#)
[STAFF](#)
[ABOUT US](#)
[EMPLOYMENT](#)
[HELP](#)
[HOME](#)

Top Ten

- Find Your School
- Child Care
- Kindergarten / Early Learning
- Transportation / Busing
- Programs / Curriculum
- Learn4Life
- Adult Learning
- TDSB Facility Permits
- Transcript
- School Year Calendar

Key Information

- Report Cards
- Trustees and the Board
- Registrar's Office
- Code of Online Conduct
- Student Health and Safety
- Online Learning Resources
- How to Get Involved
- Fundraising and Donations
- TDSB Policies
- Nutrition Programs
- Special Education
- Student Accident Insurance
- Who to Contact at the TDSB
- Questions and Concerns

Calendar

August 2013						
S	M	T	W	T	F	S
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

TDSB's Elementary Academies
[Apply now](#)

Parents of:
[ELEMENTARY STUDENTS](#)
[SECONDARY STUDENTS](#)



The early years of education are designed to encourage and support the development of students' growth and to build a foundation for success. Students will acquire basic knowledge, skills, behaviours and habits for academic achievement and a lifetime of success. It is also important to help students feel a sense of self worth and a positive attitude toward learning.

IMPORTANT LINKS:

- [Tip on Parent/Guardian Teacher Conferences](#) - Useful tip to help prepare for parent/guardian teacher conferences
- [Assessment and Report Cards](#) - read about Ontario's new report cards
- [Report Cards - 2011/2012 Reporting Schedule](#) - report card dates
- [Parent Satisfaction Survey 2009-2010](#) - see the results of our first system-wide Parent Satisfaction Survey
- [Smaller Class Sizes](#) - learn more about the this Ministry mandated initiative
- [Homework](#) - learn more about homework and how you can help
- [Read and Write Gold](#) - Download this free computer program to provide literacy support at home for students of all ages and abilities
- [Kindergarten/Early Learning Program](#) - information on registration, curriculum, ELP school sites, and more
- [Secondary School Information Nights](#) - Discover a wealth of information about our secondary schools, including programs, special characteristics, and diploma requirements
- [Meet Your Trustees](#) - find out who your local Trustees is and how to contact them
- [Parenting and Family Literacy](#) - help your child get ready to enter school
- [Professional Support Services](#) - Professional Support for Students

CHARACTER DEVELOPMENT
 Build character - build success: **Respect (September)**
[Learn More...](#)



PIAC
2011/2012 ANNUAL REPORT

Choices 2013-2014
 Secondary School Courses and Planning Guide
[Now available](#)


Parent's Guide to the TDSB


Admission & Registration


Caring and Safe Schools


Parent & Community Involvement


School Library


EQAO Scores


Continuing Education


Services in the Community

Appendix F

Snapshot of the Simplified Chinese Version Webpage of TDSB

多伦多教育局为英语学习者提供哪些服务？

- 36 所小学及 14 所中学为曾仅获得有限正式教育的学生开办读写能力强化学术课程 (Literacy Enrichment Academic Program, 简称 LEAP)。
- 笔译和口译服务。
- 四间新移民接待中心为新移民中学生提供入学评估。
- 为学业可能面临危险边缘或具有特殊需求的新移民提供母语评估 (提供超过 40 种语言的评估服务)。
- 与在校的安省定居安置工作人员合作, 协助新移民家庭及学生。

我要怎么辅助孩子学习？

参与孩子的学习以帮助孩子获得成功的方法：

- 与老师/学校/您的孩子进行沟通, 了解其学业和进展。
- 出席教师家长座谈会和教师家长的单独会面。
- 检查孩子的成绩单, 与孩子和老师讨论成绩单的相关事宜。
- 浏览 www.eqao.com 网站, 了解有关三、六、九年级的全省考试 (EQAO, 即安省教育质量和问责办公室的全省统一测验)。
- 要有耐心并予以支持: 学习新的语言需要时间!
- 浏览 www.edu.gov.on.ca/abc123 网站, 该网站提供 15 种语言, 可获得帮助您的孩子学习阅读、写作和数学的诀窍。
- 带您的孩子去当地的多伦多公共图书馆分馆。

欲获得更多信息, 请联系:

您孩子的老师: _____
 您孩子的学校: _____

或访问多伦多教育局网站:

www.TDSB.on.ca

Simple Chinese

什么是 ESL/ELD 辅助课程？

初抵加拿大的时候, 大部分的学生都能够以自己的母语阅读和写作, 但英语程度有限。英语作为第二语言 (English as a Second Language, 简称 ESL) 课程帮助学生学习英语, 如此一来他们便能和说英语的同学一起充分参与全部课程以及学校生活。

在安省学校就读之前仅获得有限正式教育的学生将接受英语读写开发 (English Literacy Development, 简称 ELD) 辅助课程。ELD 课程帮助学生发展英语的读写能力。这些学生同时将获得不同学科的学术知识, 例如数学和社会学。