Chapter 3

Literature Review

Introduction

The literature to be reviewed for the study of culture as reflected on school websites focuses on two major subjects:

3.1 '**Culture**' as reflected on school websites

3.1.1 Defining 'culture', cross–cultural issues, multi-culture and social education.

3.1.2 The role of schools in teaching social behaviour, moral codes, and values as part of the existing culture.

3.1.3 Social learning theory.

3.2 School websites as '**Windows of culture**' - From E-Learning to E-Schooling

3.2.1 Interface design of web-based educational sites and culture.

3.2.2 Interactivity through new communication media.

3.2.3 The Intranet – E-schooling.

3.2.4 Cyber societies.

Together, these two subjects form the literature background necessary for understanding school websites as '**windows of culture**' – which reflect current Israeli culture, and at the same time, present a new direction in the use of computers in the school environment,

from web-based learning methods (E-learning), to E-schooling, which provides an additional environment that serves to educate and impart culture to the collectivity**.**

3.1 'Culture' as reflected on school websites

The famous story of Babylon in the book of Genesis describes how man was changed by the attempt to build a tower to reach heaven. Before, humankind consisted of – one culture, one culture group which shared one language. "*And the whole earth was of one language and of one speech… And they said: 'Come, let us build us a city, and a tower, with its top in heaven, and let us make us a name; lest we be scattered abroad upon the face of the whole earth.'… And HaShem said: 'Behold, they are one people, and they have all one language; and this is what they begin to do; and now nothing will be withholden from them, which they purpose to do…Come, let us go down, and there confound their language, that they may not understand one another's speech*.' (Genesis 11:1-7)

Different Cultures were created with different languages, but as well-known Dutch anthropologist Hofstede puts it: ***'different minds but common problems'*** (Hofstede 1991, p. 3). People, groups and nations, all think, feel and act differently, yet at the same time are exposed to common problems, such as how to handle threats, changes, and political, economic, structural and technological dilemmas.

As worldwide communication has become accessible to all, and with it the spread of terms such as 'globalization' and 'the *global village'*; the issue of *'culture differences'* -

understanding the differences among the various 'group-cultures' - has become more and more relevant. (Néstor 1996)

Culture, particularly *'cross-culture'*, *'multi culture*' and/or '*intercultural differences*' are related to *'Cultural anthropology'*, *'Cultural sociology'* and the classification of cultures according to a set of dimensions.

This research focuses on the reflection of culture on school websites. Therefore, it is necessary to begin by defining the term '***culture***[1]' and its characteristics. Furthermore, as the major role of education is "*transmitting the culture of the adult world to the young*" (Hurn 1993, p. 4); in other words, the process through which skills, facts, values, norms, and attitudes, which all form part of the culture, are being taught to the young, we should define this term and its applications on school websites.

3.1.1 Definition of 'culture'

Edward T. Hall is one of the first known researchers in the field of *'Cultural anthropology*' and *'Cultural sociology'*. In his book "*The Silent Language*" (Hall 1963), he stresses the importance of the subconscious in culture, pointing to the unspoken language shared by a group of people of the same culture, but unknown to the 'outsider'. Hall's later publications are more relevant to the subject of my research. Hall (1976, 1984, 1987, and 1990) discusses three important concepts of cultural differences: ***time***, ***context,*** and ***space***. Hall (1990) defines two categories of '*time*' (monochromic vs.

[1] "Culture, is one of the two or three most complicated words in the English language" (Williams 1976, p. 87).

polychronic), which he uses to discuss cultural perceptions of time. Hall (1990) refers to the term '*space*' to describe an individual's personal space, the invisible boundary which can be perceived visually as well as physically.

The concepts of '*time*' and '*space*' are relevant to the school websites environment, but in a different manner. It is commonly said that the use of school websites has broken down time and space limitations.

ORT school websites provide countless examples of the changes in the use of these terms. Teachers and students communicate throughout the day, beyond the schools' physical limitations.

Context: Hall's (1990) definition of 'context' is more applicable to my research in the sense that it refers to the amount of information that a person can comfortably manage, and the way in which it is transmitted, or communicated. Hall (1990) makes a distinction between 'high' and 'low' context cultures. Background information in 'high context cultures' is implicit: people in a high context culture tend to convey more information implicitly, belong to more extensive networks, and usually are better informed on many subjects. On the other hand, much of the background information in low context cultures is made explicitly through interactions. People in low context cultures tend to verbalize much more background information, and are less well informed on subjects beyond their own interests.

Various researches on educational websites have in fact focused on these three terms. For example: *'Designing and Studying Learning Experiences That Use Multiple Interactive Media To Bridge Distance and Time*' (Dede, Brown L'Bahy, & Whitehouse 2002) and *'Anytime, Anyplace and the Community College: Ten Emerging Insights*" (Milliron & Prentice 2004).

High or low context can be reflected on schools websites, enabling us to identify high or low context cultures. Future research following this path may reflect Israel's culture in the way information is placed on ORT school websites.

Kroeber and Kluckhohn's (1952) definition of culture may serve as a guideline in selecting an appropriate content that highlights cultural characteristics on websites in general and on schools websites in particular.

After collecting more than 160 different definitions of the term '***culture***' , Kroeber and Kluckhohn (1952) define culture as consisting of: "*patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditional elements of future action*." (Kroeber & Kluckhohn 1952: 181, cited in Dahl 2003)

The key words in their definition: '**patterns**' , '**behaviour**', **'transmitted symbols'**, **'achievements of human group'**, **'traditional ideas'** and **'attached values'**, all of which are reflected on websites, help distinguish one culture from another. For instance, symbols may take the form of logos, or traditional ideas may be illustrated with pictures, activities, etc.

Another useful definition of culture introduces a number of additional factors beyond values and behaviour: "*Culture is a fuzzy set of attitudes, beliefs, behavioural norms, and basic assumptions and values that are shared by a group of people, and that influence each member's behaviour and his/her interpretations of the "meaning" of other people's behaviour*" (Spencer-Oatey, cited in Dahl 2003).

This definition not only explains what culture is, but also describes the culture's functions in everyday life: culture may be used to influence behaviour as well as to interpret it. This interpretative role of culture is particularly important when analyzing cross-cultural interaction, or reaction towards products created in a different cultural context.

Spencer-Oatey 's (cited in Dahl 2003) definition of culture raises several issues about user interface (UI) design, especially on school websites which constitute an educational environment. The role of culture as a factor that may both influence and help interpret behaviour, highlights not only the reflection of culture on school websites but also the influence that these websites may have on the users (students, teachers and parents), in preserving culture as well as creating 'new culture' (Davis 1995).

In this research I have chosen to apply Hofstede's (1991) definition of culture and Marcus' (2001) application of this definition to website designs.
Hofstede (1991, p.4) defines culture as "*the collective programming of the mind which distinguishes the member of one group or category of people from another*."
When defining 'culture', Hofstede (1991) focuses on cultural differences in the essential patterns of thinking, feeling, and acting that are well-established by late childhood and manifest themselves in a culture's choices of symbols, heroes/heroines, rituals, and values. Hofstede (1991) uses the *'onion diagram'* as a model to describe these manifestations of culture.

'**Values**' form the core of Hofstede's (1991) model. They constitute the most hidden layer of culture, and represent the ideas that people have about how things "ought to be". As such, Hofstede (1991, p.8) also emphasizes that since they are acquired at a young age,

"*many values remain unconscious to those who hold them. Therefore… they can only be inferred from the way people act under various circumstances.*" According to Hofstede (1991), values strongly influence behaviour.

Abstract values such as respect for the elderly, assistance to the disadvantaged in society, respect for human dignity, and so forth are put into practice by the educational system through activities whose purpose it is to impart these values to the students.

Hofstede (1991) describes three additional layers of culture surrounding the core that are easily observed:

- '**Rituals**', "*are collective activities, technically, superfluous in reaching desired ends, but which, within a culture, are considered as socially essential: they are therefore carried out for their own sake*" (Hofstede 1991, p. 8).

Rituals such as the Holocaust remembrance ceremonies, Independence Day celebrations, and Bar Mitzvah observance are all connected to the cycle of life (rites of passage). They mark events on the timeline of humans and society, and grant symbolic importance to these rituals.

These rituals are recurrent and well ordered, and are characterized by recurring elements. They usually involve the participation of a group of people, which adds an emotional aspect to the events.

- '**Heroes**' "*are persons, alive or dead, real or imaginary, who possess characteristics which are highly prized in a culture, and who thus serves as models for behavior*" (Hofstede 1991, p. 8).

Yitzhak Rabin, the Prime Minister of Israel who was assassinated in 1995, navigator **Ron Arad** whose fate remains unknown since his capture in Lebanon in 1986, **Ilan Ramon**, the Israeli astronaut who perished with the other crewmembers of the Columbia shuttle in 2003, or **Anne Frank**, the Jewish girl who was murdered during the Holocaust

in 1945 and whose diary has provided testimony to the horrors of the Holocaust and has become a symbol of the suffering of millions of Jews during the second world war: all are examples of people perceived as heroes in Israeli culture.

- **Symbols**, "*are words, gestures, pictures or objects that carry a particular meaning which is only recognized by those who share the culture*" (Hofstede 1991, p. 7).

As mentioned earlier, flags, Judaica – objects related to Judaism (the Menorah, the Shofar of Yom Kipurim, etc.), terms such as "the battle of Tel Hai", "Choma ve Migdal", "Dgania, em hakvutsot", and so forth, are symbols.

Hofstede highlights two important characteristics of 'culture': it is a **collective phenomenon** (shared by people living within the same social environment) and it is **learned**, not inherited.

The classical perspective which sees education as an institution aimed at preserving culture and passing it on to the next generation, ties the concept of education not only in the sense of providing skills but also to the concept of cultural identity and values. School websites provide an additional environment to educate and impart culture to the collectivity. They reflect the collective phenomenon of behaviour and traditional ideas, and at the same time, reflect the efforts made by educators to teach cultural identity, values and social skills.

Culture concepts and pattern

Hofstede's (1991) work on cross cultural differences is considered to be one of the most popular in the field.

Before him, behavioural concepts were identified and used to distinguish between different cultures. These concepts, such as paralinguistic concepts (accents, intonation,

speed of talking, etc.), space organization, body movements, and eye movements, play a vital role in intercultural relationships. Hall discusses extensively this subject in his works, *'The Silent Language'* (1963) and *'The Hidden Dimension'* (1969).

On the Internet, these behavioural concepts are invisible, and thus less relevant. In a way, the absence of these cultural differences in this medium can be seen as an advantage, as it is more neutral and promotes communication.

Trompenaars and Hampden-Turner (1997) classify cultures according to a series of behavioural and value patterns, focusing on the cultural dimensions of business executives.

Shalom Schwartz (1992, 1994) uses a list of 57 values (the "SVI" - Schwartz Value Inventory), which he asks respondents to assess, as to how important they feel these values are as "guiding principles of one's life".

These last two approaches could also be applicable to the analysis of school websites. A comparative study of the results of the different approaches would be most interesting. (Schwartz, cited in Dahl 2003)

The main contribution to the field of cultural differences comes from Hofstede's (1991) work on culture concepts and patterns. Hofstede (1991) addresses in his work the problems inherent in the study of cultural differences: the lack of precision and of a universally recognized framework for classifying cultural patterns. Hofstede (1991) developed his theories on culture dimensions by studying work-related values among employees of IBM in 53 countries worldwide (including in Israel) in the 1970's.

His work can be easily applied to a large number of everyday intercultural encounters. It is particularly useful, as it simplifies the complexities of culture and its interactions by categorizing them into five easily understood cultural dimensions: *'power distance'*,

'individualism /collectivism', 'masculinity/femininity', 'uncertainty avoidance', and *'long-term orientation'*. The latter is not included in my study as Hofstede did not study '*long-term orientation*' in the case of Israel.

"*Power distance is often reflected in the hierarchical organization of companies, the respect that is expected to be shown by the student towards her or his teacher, the political forms of decentralization and centralization, by the belief in society that inequalities among people should be minimized, or that they are expected and desired"* (Dahl 2003).

In Hofstede's words, power distance is *"the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally*" (Hofstede 1991, p. 28).

Hofstede's second dimension is ***'Individualism/Collectivism'***, which he defines as: "*individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty*" (Hofstede 1991, p. 51).

Hofstede defines '***Masculinity/Femininity***' as follows: "*masculinity pertains to societies in which social gender roles are clearly distinct (i.e., men are supposed to be assertive, tough, and focused on material success whereas women are supposed to be more modest, tender, and concerned with the quality of life); femininity pertains to societies in which social gender roles overlap (i.e., both men and women are supposed be modest, tender, and concerned with the quality of life)"* (Hofstede 1991, pp. 82-3).

'Uncertainty avoidance', Hofstede's fourth dimension, is defined as "*the extent to which*

the members of a culture feel threatened by uncertain or unknown situations" (Hofstede 1991, p. 113).

It is interesting to note that Hofstede states: "*both within Judaism and within Islam there is also a clearly visible conflict between more and less uncertainty avoiding factions, the first dogmatic, intolerant, fanatical, and fundamentalist ('There is only one Truth and we have it'), the second pragmatic, tolerant, liberal, and open to the modern world*" (Hofstede 1991, p. 133).

A good example is ORT Dati Bait Shan, one of the ORT religious schools, where such conflicts take place. While their website places more emphasis on religion and Jewish tradition, they encourage the students to participate in this 'new' medium.

Since the framework created by Hofstede (1991) is easily applicable, Marcus (2001) follows Hofstede's model to analyze websites worldwide. Although he mentions other organizational anthropologists such as Edward Hall (1990) and Trompenaars (1998), Marcus considers Hofstede's (1991) work to be the most appropriate when analyzing website interface design.

"*The Web enables global distribution of products and services through Internet Websites, intranets, and extranets. Professional analysts and designers generally agree that well-designed user interfaces improve the performance and appeal of the Web, helping to convert "tourists" or "browsers" to "residents" and "customers." The user-interface development process focuses attention on understanding users and acknowledging demographic diversity. But in a global economy, these differences may reflect world-wide cultures*" (Marcus 2001).

The educational system in every country reflects its people's culture. School websites can be considered as windows that allow a glimpse into the different cultures. I have named them "**windows of culture**".

Israel as an example of a multi-cultural society

Israeli culture is difficult to define. Despite its small size, Israel's culture consists of numerous bases: it is a multi-culture. Waves of immigration, Zionism, the land, Jerusalem, the Bible, pioneering ideology: 'Halutziut', the Holocaust, war and the army, religion, the Israeli-Arab conflict, gender roles: the changing role of women, westernization and the decline of collective culture all contribute to the cultural identity of Israel.

Israeli society is constantly moving, changing and developing, pulled in different, at times even contradicting, directions by all the groups and factors affecting its culture. "*Israeli society in the early 21st century is struggling toward a collective identity, caught in a web of internal tensions and contradictions. Individualism may have replaced many of the collective ideals of earlier generations but idealism – although it sometimes becomes muddled with patriotism – has not disappeared entirely*" (Israel 2004).

While this research focuses on cultural dimensions on a national level as they are reflected on school websites, ORT school websites might also reflect some of the multi-cultural elements characteristic of Israeli society. However, this extends beyond the realm of this research.

3.1.2 The role of schools in teaching social behaviour, moral codes and values, as part of the existing culture.

Traditionally, education has been perceived as an institution aimed at preserving culture and passing it on to the next generation, tying the concept of education not only to the necessity of providing skills but also to the concepts of cultural identity, values and social skills.

While some hold the belief that education is a faithful reflection of social reality, and this is how it should remain, thus requiring educators to quickly adapt to change, others believe that education should be shielded from the winds of change, and should offer stability, security, stable values and culture.

There is, however, a general consensus on one of schools' most important roles: imparting social education.

Dewey (1916) perceives schools as first and foremost a social forum. All the activities that teach the students to make use of their own skills and abilities to achieve society's objectives come together in schools.

Social education is based on the desire to tie education of the individual to the creation of a society of which the individual forms an integral part.

The objective is to turn the school environment into a living society, in which students learn to put into practice the fundamental principles of a democratic society, in the hope that they will internalize social and cultural values and norms, adopt positive social approaches and acquire basic human relations skills (Michaeli 2002).

"*What nutrition and reproduction are to physiological life, education is to social life. This education consists primarily in transmission through communication. Communication is*

a process of sharing experience till it becomes a common possession. It modifies the disposition of both the parties who partake in it" (Dewey 1916).

Schools websites offer an additional forum where the formal transmission of culture through communication takes place; they further extend the social framework described by Dewey (1916).

The educational program in Israel addresses the social issues and values of the youth, as well as the questions high Israeli society's agenda.

In the past, the cultural environment of Israeli society was relatively homogeneous. However, at the present, two contradictory processes exist: on one hand, globalization, which contributes to the worldwide westernization (CNN, MacDonald's, Hollywood, etc.), and on the other hand, traditional cultures which are strengthening (such as religious and nationalist movements). Waves of immigration due to factors such as demand for labour, national crises, or ideology (Zionism), have created multi-cultures in developed countries. Among historians, sociologists and anthropologists who have studied Israeli society, it is accepted nowadays that the Israeli society is undergoing a transition from social, cultural, political and economic uniformity and unity, to diversification and decentralization (Gidron, Katz & Bar, 2003).

The religious-cultural, ideological-political, socio-economic synthesis which characterized Israel for the first 30 years of its existence, is no more. (The Israel that Hofstede (1991) studied in the context of his research belonged to that early period.) Taking into account the changes currently taking place in Israeli culture, one should ask, in the context of this research, whether these cultural changes are visible. If so, these could be observed through the school websites. A comparison of current cultural

dimensions on ORT school websites with Hofstede's (1991) findings could reveal cultural changes that have occurred in Israeli society.

3.1.3 Social learning theory

In the introduction to his book, "***Technology and Education in the Age of Information***," Professor Gabriel Salomon (2000, p. 9) states: "*It is easy to understand that a book which seeks to deal with information technology cannot focus solely on information technology ... indeed, this book is supposed to deal with information technology in education, but in the wider context of education in the age of information – this is the essence of this book.*"

I agree with Salomon's views. Indeed, even though this research focuses on culture as it is reflected on school websites, I believe that the subject should be studied in a broader context: social interaction on school websites, differences among school social climates, and their effect on school websites, emerging communities, or cyber societies on school websites, etc.

School websites call for a renewed look at educational, pedagogical and social interactions which occur within the school organization. These interactions are the outcome of the organizational structure, and are tied to the managerial-social climate created by each and every school.

While Marcus' (2001) work is limited to website design and elements of design which reflect culture, there are many more aspects of school websites in the context of culture that could be studied; for instance, the effect of school websites on the social climate and culture of schools.

Albert Bandura is one of the most prominent names in the field of Social Learning Theory in Education. He emphasizes the importance of observing and modeling the behaviours, attitudes, and emotional reactions of others. Bandura (cited in Kearsley 2000) states: "*Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action*." Social learning theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural, and environmental influences.

Bandura (cited in Kearsley 2000) formulates his findings in a four-step pattern which combines a cognitive view and an operant view of learning, and which includes the following terms:

1. ***Attention*** -- the individual notices something in the environment.
2. ***Retention*** -- the individual remembers what was noticed.
3. ***Reproduction*** -- the individual produces an action that is a copy of what was noticed.
4. ***Motivation*** -- the environment delivers a consequence that changes the probability the behaviour will be emitted again (reinforcement and punishment).

Bandura's work draws from both behavioural and cognitive views of learning: he believes that the mind, behaviour and environment are all important factors in determining the learning process (Huitt &. Hummel 1997).

The researcher Julian B. Rotter (1954) supports this theory. The main idea in Rotter's social learning theory is that personality represents an interaction of the individual with his or her environment. "One *cannot speak of a personality, internal to the individual, that is independent of the environment. Neither can one focus on behavior as being an automatic response to an objective set of environmental stimuli. Rather, to understand behavior, one must take both the individual (i.e., his or her life history of learning and experiences) and the environment (i.e., those stimuli that the person is aware of and responding to) into account. Rotter describes personality as a relatively stable set of potentials for responding to situations in a particular way*" (Catanzaro & Mearns 2003).

Salomon & Perkins (1998) bring forward a broader view of the social learning theory. Their new approach sees the learning process as a ***socially interactive situation,*** as opposed to seeing it as a cognitive process between the learner and himself. The communication among learners helps them to acquire knowledge, which they would not have gained had they worked on their own. "*Constructionism supports the viewpoint of constructivists that the learner is an active builder of knowledge. However, it emphasizes the particular construction of artifacts that are external, and shared by learners…the processes of construction are more evident when learners produce through social interaction with others and share representations of their understanding and thoughts*" (Han & Bhattacharya, cited in Salomon & Perkins 1998).

In their article "***Individual and Social Aspects of Learning***," Salomon and Perkins (1998) offer six meanings of the term ' ***Social Learning'***.

1. *Active social mediation of individual learning* – a fundamental form of social learning in which another person or team helps an individual learn, such as teachers, trainers, parents, other students, etc.
2. *Social mediation as participatory knowledge construction* – a socio–cultural version which perceives learning as the outcome of participation in a social process of knowledge construction.
3. *Social mediation by cultural scaffolding* according to which, cultural artifacts, together with the culturally and historically-based wisdom and hidden assumptions that went into their design, are perceived as serving as social mediators of learning in a far more important way.
4. *The social entity as a learning system* – a group, which consists of a team, organization, culture, or other collective, constitutes a collective learning system.
5. *Learning to be a social learner* – a fundamental aspect of learning, learning to learn; that is acquiring knowledge, understanding and skill about learning itself.
6. *Learning social content*, which refers to the ability to handle social interactions, such as getting along with others, assertiveness, collaboration with others, collective decision-making and actions, etc.

Perkins (cited in Oz 2000), following the footsteps of the Philosopher D. C. Phillips (1995), identifies three distinct roles in constructivism and calls them "**The active learner**", "**The social learner**", and "**The creative learner**".

The active learner: Knowledge and understanding is actively acquired. Constructivism generally casts learners in an active role. Instead of just listening, reading, and working through routine exercises, they discuss, debate, hypothesize, investigate, and take viewpoints.

The social learner: Knowledge and understanding is socially constructed. Constructivists often emphasize that knowledge and understanding are highly social. We do not construct them individually; we co-construct them in dialogue with others. **The creative learner**: Knowledge and understanding is created or recreated. Often, constructivists hold that learners need to create or recreate knowledge for themselves. Assuming an active stance is not sufficient. Teachers should guide them to rediscover scientific theories, historical perspectives, and so on.

When referring to the term of Social Learning, Bandura (cited in Kearsley 2000) Rotter (cited in Mearns 2004), Salomon and Perkins (1998) among others, actually consider the question "*how do we learn?*" and "*what is the correct way of creating a learning environment which will enable efficient and effective learning?*"

Nahmias (2001) describes a research recently conducted in Israel as part of an international research to find innovations in the application of computers in schools. "*We found that in most [schools] technology was not the trigger for change and innovation, the pedagogical approach was. Schools with a well established pedagogical approach applied all the means, including technology to this use… In these conditions, technological tools have the potential to motivate and promote creativity*" (Nahmias, 2001).

In answering these issues, the researchers mentioned above place an emphasis on social learning theory and stress the active role of schools in creating the positive social climate necessary for effective and efficient learning. Marcus (2001), on the other hand, makes passive observations of a wide range of websites, focusing on elements of culture in their interface design.

In my opinion, all these approaches coexist on school websites. The interface design reflects not only culture but also the social climate of the school.

3.2 School websites as 'Windows of Culture' – From E-Learning to E-Schooling

Ever since the introduction of the Internet to schools approximately seven years ago, teachers, instruction designers and pedagogical experts have sought ways to integrate the Internet to the study of contents of various subjects (E-learning), and have developed great expectations from that media.

When presenting the advantages of E-learning, Microsoft (Microsoft 2003) writes in one of its adverts that with computers connected to the Internet, information is just a few clicks away. Student may explore different subjects more in depth and more significantly than they would have been able or willing to before. Is that so?!

In his article, "*The integration of 'conservative' and 'revolutionary' e-learning courses in schools*", Jonathan Kaplan (2001), the Director of the ORT-Aviv Virtual School and of the Unit for Implementation and Integration at the ORT Research and Development Center, provides a long list of advantages of E-learning:

- The distribution of study material from the developing body (study programs) to the end user.
- Accessibility and utilization of extensive, diversified, up-to-date and authentic sources of information.
- Utilization of these sources of information to develop a research environment.
- Graphic presentation and illustration of complex or abstract processes.
- Active learning through interactions with the computer or with other participants in the course.
- Publication of the students' work.

- Discussions and dialogues through forums (unsynchronized tools), conference calls (synchronized tools) with students or teachers.
- E-learning based on Internet technology helps to break down conventional frameworks of time, place, student group and study program.

The advantages mentioned above underlie the expectation that computers, and E-learning in particular, will lead to changes in teaching methods.

In the pedagogic field, E-learning serves a number of objectives:

- To free learning from time and space limitations.
- To enable the participation of additional teachers and experts in the teaching and learning process.
- To broaden student encounters beyond the classroom.
- To offer new subjects and professions.
- To place an emphasis on the learning process rather than on achievements.

Intensive activities on the Internet are being developed in a large number of schools. These activities are based on the use of the Internet as a means to broaden the pedagogical-organizational infrastructure of schools (i.e.: E-schooling).

In a joint article, Dr. Gil Amit, Director of the Research and Development Center of ORT Educational Organization, and Jonathan Kaplan write:

"According to this approach, the Internet serves as an intranet within the school, and the connection between the students at home and their school through the Internet constitutes an integral part of this intranet. In this approach, the focus shifts from the interaction between the student and the subject matter to the interaction between the students and teachers ***around*** *the subject matter"* (Amit & Kaplan 2003).r

In my opinion, interactions taking place on a school website do not solely focus on subject matters. A website is a window which provides a glimpse into the school community, culture and social life. The interactions taking place on the website highlight the relations among teachers, students and parents (the community) and the different types of social interactions (extra curricular activities – for instance charity work).

3.2.1 Interface design of educational web-based sites.

Websites, like any other products, interact with the cultures of societies in which they function, and contain embedded cultural values and objectives.

Kersten et al. (1999) have introduced two terms, **Software for Cultures and Cultures in Software**, which highlight culture and cross-culture, and at the same time, the issues of e-learning or web-based learning.

Furthermore, they draw attention to the relationship that exists between these two terms: software and culture.

The term "***software for cultures***" expresses the tendency towards globalization and a single global market. New products intended for different markets need to be adapted to the different cultures within each one of the markets. It "refers mainly to the customization of software and to the development of different software for different markets" (Kersten et al. 1999). This tendency has led to the development of research on cultural differences which should be taken into account when designing objects, and particularly websites, in order to achieve the main objective, which in this case is effective learning.

On the other hand, the term "***cultures in software***" refers to the traces of culture found in software and on Internet sites: in every product, on every object, whether intentionally or unintentionally, there are "***cultural markers***". "***Cultural markers***", such as national symbol, colour, or special organization logos on websites, "*are interface design elements and features that are prevalent, and possibly preferred, within a particular cultural group. Such markers signify a cultural affiliation*" (Badre 2000).

Despite the differences between these two approaches, one emphasizing the cultural differences that influence objects and websites, and the other emphasizing the existence of cultural elements in each website and object, both attempt to define and characterize the same cultural elements.

Although this research focuses on identifying those elements of culture that are reflected on school websites ("*cultures in software*"), it would be interesting to further research on how the use of school websites affects the conventional education of culture. Can this influence be seen on Hofstede's (1991) symbolic layer, through which new words, pictures and objects are introduced to a culture?

Cultural and communication terms, emoticons, and objects such as pull-down menus and bullet-style presentation templates have spread from software to television, and into everyday written language, becoming truly global. For instance, "*the word 'bookmark' migrated back from the Internet jargon to spoken English with a different meaning then what was used before the introduction of browsers (e.g., "Let me bookmark this meeting"). These are just few examples of the influences of software developers' culture on other cultures*" (Kersten et al. 1999).

There are two philosophical approaches to technology; one which perceives technology as a mere instrument (the instrumental theory), and the other which sees technology as the source of a new culture (the substantive theory).

These approaches, endorsed by Heidegger and Ellul, are also supported by Pacey (cited in Ebersole 1995) who state: "*technology constitutes a new type of cultural system that restructures the entire social world as an object of control…The issue is not that machines have 'taken over,' but that in choosing to use them we make many unwitting cultural choices. Technology is not simply a means but has become an environment and a way of life: this is its 'substantive' impact*."

Since Israel is a multi-cultural society, it would be appropriate to raise more questions such as: do school websites reflect multi-cultural characteristics? And if so, how do the different cultures interact? Or, what do representatives of different national cultures create through their interaction? (Phillips & Sackmann 2002)

Instructional website designers

The interface design of all educational material is essential, particularly that of computer-based learning and web–based learning software.

Research on interface design of web-based education sites focuses on two main subjects:

1. **The way in which the web can be used in the educational environment**.

   This includes questions such as 'what types of learning environments should be created, 'what are the benefits of using this method of teaching and learning?' and

'will the use of web-based learning environments improve the cost-efficiency of learning?

2. **Factors that need to be considered regarding the nature and quality of educational web-based sites**.

These factors include sensitivity to information architecture (IA), usability, and in particular sensitivity to cultural usability.

The main purpose of information architecture (IA) and usability is to establish order, to transform the assortment of ideas and digital data into a system where logic, order and significance prevail. Every site consists of some element of architectural information. The question is, what is the level of this architecture?

Information architects work with three main variables: the information needs of the user, the quality and nature of the contents, and the objectives and limitations of the organization.

The information architect's recommendations are based on:

- Organization: how will the information be organized? In alphabetical order, chronological order, or according to the subject?
- Presentation: how will the information be presented? Through words, diagrams, illustrations, pictures, sound or video?
- Navigation: how will the website users find what they require? How will they know where on the website they are?
- Change: how will the site develop over time? Will the site structure allow for changes when needed?

The success of a website is directly affected by the degree of its usability, and this is a direct result of the ability of the users to locate information, understand its content, and make use of it (for instance, search, download of files, adding messages, etc.). To a large extent, usability relies on human-computer interaction (HCI) and graphic user interface (GUI).

Alessi & Trollip (2001) address these issues by comparing websites as a teaching and learning method to other methods that make use of computers, such as using open tools ("Office") and prepared lessons presented on a stand-alone disk or on software installed on the computer's hard drive.

They see the role of web-based learning as support for the traditional on-site learning environment and support for distance learning (Alessi & Trollip 2001).

Alessi & Trollip list the following requirements which they consider necessary in a web-based learning environment: a platform, a delivery medium, a communication medium, and an integrating medium for learning and teaching. Regarding the second role, they emphasize those factors that are unique to the web or that must be treated differently when encountered in the context of the web: '*navigation*', *'hypertext links'*, *'hypermedia format'*, '*orientation*', '*browsers*', '*speed*', *'multimedia components'*, *'visual layout'*, '*structure*', '*program boundary*', '*interactivity*', *'web tools provided'*, *'user controls'*, '*stability*', *'privacy*', '*security and safety'*, and *'storing data'* (Alessi & Trollip 2001, pp. 372-399).

They add two additional important factors that are more relevant to this research:

- *'international factors'*

- *'learner and instructor role and philosophies'.*

'learner and instructor role and philosophies'- *"Learner and instructor roles tend to change or blend together in web-based learning environments…Very often when learning communities form, learning is more egalitarian, with the instructor doing more facilitating than instructing"* (Alessi & Trollip 2001, p. 396).

'international factors' – "*three factors come under the scope of web's international nature: language differences, cultural differences, and time differences* (Alessi & Trollip 2001, p. 391).

Wendy Barber and Albert Badre (2004) introduce the following terms: 'cultural markers'[2], 'genre/knowledge domain'[3], 'culturally deep vs. shallow sites' [4]as well as the term 'culturability', which they describe as: "*a term we use to emphasize the importance of the relationship between culture and usability in WWW design, but it can be expanded to apply to any software designed for international use"* (Barber & Badre 2004).

Their research focuses on three questions: *"Are there design elements which can be identified as culturally specific? Are there design elements which can be identified as*

[2] Cultural markers are interface design elements and features that are prevalent, and possibly preferred, within a particular cultural group. Such markers signify a cultural affiliation. A cultural marker, such as a national symbol, color, or spatial organization, for example, denotes a conventionalized use of the feature in the web-site, not an anomalous feature that occurs infrequently (Barber & Badre 2004).

[3] Genre/Knowledge Domain: A knowledge domain refers to the type of information being presented on the Web and describes large categories of sites. News and Media, for example, is a knowledge domain that presents similar types of information, but may vary stylistically, such as a magazine, newspaper, or broadcast. We use the term genre in the broadest sense to convey the sort or type of information presented in a web-site (Barber & Badre 2004).

[4] Culturally Deep vs. Shallow Sites: We define a culturally deep website as one that occurs in the native language of its country of origin and links to other native-language sites. A culturally shallow site is one that occurs in a secondary language and links to other secondary language sites (Barber & Badre 2004).

genre specific? What, if any, relationship exists between culture and genre as reflected in WEB design?" (Barber & Badre 2004).

This research joins the work of others mentioned above in enabling us to make a more perceptive analysis of the elements of culture found on websites.

3.2.2 Interactions in the new communication media

Computers were already introduced in schools for the purpose of teaching and learning during the 1970's. Over the next two decades, growth rates were slow and integration processes disappointing. In the 1990's, there was a significant increase in the introduction of information technology to schools (efforts to introduce it continue to grow).

During that period the use of the Internet also permeated a wide variety of uses in the field of communication (accessibility to information, synchronized and unsynchronized tools, discussion groups, chat groups, and e-mail). A powerful tool was added to be used in distance learning, which gave birth to the concept of E-learning.

Perkins (cited in Salomon 2000) claims that within the design foundation of anything – instrument, system or a new social order, lies the logic that determines the design. The design is not only the result of trial and error and not even improvised. Design is made in an informed manner, and is guided by leading questions and considerations which answer these questions. Perkins (cited in Salomon 2000) gives four leading questions which should be answered concerning anything that has been designed or is about to be designed:

1. What is the underlying logic (theory, principles, ideology)?

2. What objectives (declared and hidden) does it seek to achieve?
3. How is it constructed and how does it work?
4. What evidence is there that it is effective?

The questions raised by Perkins (cited in Salomon 2000), the terms used by Wendy Barber and Albert Badre (2004), and Alessi & Trollip's (2001) list of requirements necessary in a web-based learning environment, provide numerous ideas that can and should be applied to user-interface design for multi-cultural audiences and enable us to analyze school websites holistically: education, pedagogy and school as one.

The area of Computer-Mediated Communication (CMC) has drawn the attention of researchers who seek to take a closer look at the kind of interactions that take place in this medium of teaching and learning. Previous research has pointed out four types of interactions that influence the learning process in an E-learning environment. New research has mainly focused on four defined categories of student interaction: (a***) learner-content***, (b) ***learner-instructor***, (c) ***learner-learner***, and (d) ***learner-interface*** (Hillman,Willis & Gunawardena 1994; Moore 1989, cited in Sutton 2001).

The first two (***learner-content; learner-instructor***) can be found in any teaching/learning situation. With the development of education technology (mainly using computers and communication tools) educators pay more attention to the importance and benefit of 'learner-***learner'*** interaction and ***'learner-interface***' (Moore cited in Sutton 1999).

The fourth type of interaction that is unique to distance education, ***'learner-interface***', was added by Hillman, Willis, and Gunawardena (cited in Sutton 1999). The authors describe the ***'learner-interface'*** interaction as the interaction that takes place between the learner and the technology. "*Students must use the technology to interact with the content,*

the instructor, and the other students. In many distance education classrooms, without learner-interface interaction, the other three types of interaction cannot take place".

The main focus of these researches is the question of student achievement and satisfaction. For example in ***'learner-instructor'*** interaction, Sutton (2001), following Moore (1989), points out the role of the instructor as an expert who needs to stimulate the student's interest and motivate them.

According to Sutton (2001) there has been very limited research on the effects of interaction within computer mediated environments (CMC). He, like other researchers, has drawn a comparison between classroom teaching situations and distance education. Again, his main concern is the students' success in an E-learning environment as compared to their success in face-to-face situations. "*Such separation is inherent in CMC-based education, making interaction among students and with the instructor even more crucial. Consequently, educators must be aware of and address the extent, modes, and nature of interactions that can occur among physically remote participants*" (Sutton 2001).

Sutton (2001) presents us with a fifth form of interaction that enhances achievement and satisfaction, and which may occur even when all students do not interact directly. "*Those who actively observe and cognitively process the interactions of other participants should substantially benefit from vicarious interaction"* (Sutton 2001).

3.2.3 The Intranet - E- Schooling

In his article, Steven Telleen (1996) stresses the organizations' need for the intranet: "*There are immediate and compelling reasons for large organizations, public and private, to adopt Intranets. They have been struggling with a series of complex organizational*

scaling issues for decades, and not entirely by chance, the Internet technology applied to internal networks simplifies many of these issues. In addition, many organizations already have in place the infrastructures and attitudes required to adopt an Intranet. They have the need; they have the hardware; and the Internet technology is providing the software to make it all work."

Telleen (1996) indicates the organizational needs and ties them to the level of technological and cultural readiness.

Gil Amit states that E-learning should address the needs of schools and provide solutions to various problems. "*One must find those issues where E-learning solves a problem and makes a contribution which can be perceived and analyzed within an adequate time frame*" (Amit 2002).

Robert Christensen (1996) from the University of Canberra, discusses the issue of educational Intranet and presents the following illustration in order to emphasize that a crucial element in the use of intranets is the level of complexity of the Intranet uses. The diagram below illustrates the various levels of complexity.

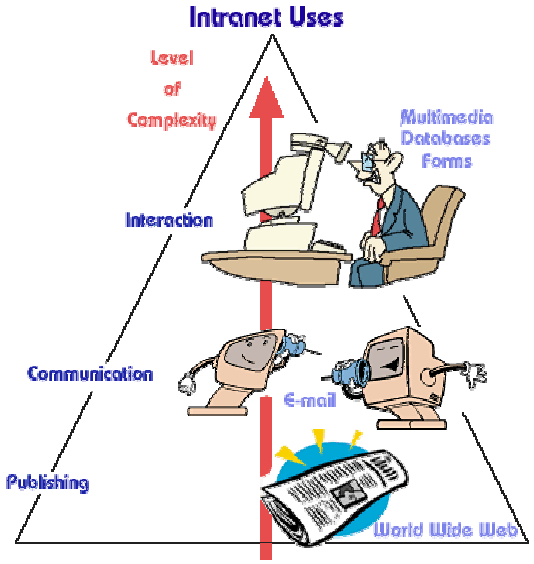

Figure 3.1 – Introduction: Educational Intranet by Robert Christensen (1996)

Christensen states: "*An Intranet typically has three features lacking on the Internet:*

1. *Speed - broad bandwidth*
2. *Security - private internal network (LAN/WAN), protected from Internet users by a firewall*
3. *Control - Enterprise network management to ensure reliability*

The Intranet can be viewed as an information utility for the enterprise. It doesn't matter whether you're using a Mac, Windows or a UNIX workstation - you plug in to the Intranet and find what you need, from documents to email to data to audio and video. Corporate and department information is accessed via the standards of the Internet: e-mail (SMTP), WWW, file transfer (ftp), and other Internet services" (Christensen 1996).

ORT school websites are a good example of this higher level of complexity. They are characterized by a high level of interactions among all the participants.

The State Library of Victoria Melbourne, Australia (1999), provides the following four categories of advantages of setting up an educational Intranet at school: 'benefits for the schools teaching environment', 'benefits for students', 'benefits for teachers', and 'technological infrastructure benefits'.

In response to the question *'Why should schools consider developing an Intranet?*' they give the following reasons:

- *Centralized access to information*
- *Improved communication*

- *Better document management*
- *Ability to share information and resources*
- *Ability to develop Internet/intranet skills*
- *Excellent learning tool*

Various communication technologies have given rise to more researches where the main subject is the different types of interactions in those different mediums: asynchronized vs. synchronized; chat rooms vs. forums vs. email; online vs. offline situation. While some of these researches focus on the question *'What kind of interaction takes place in…?*', others try to answer the question *'What is the difference between …?*' and *'What are the advantages of this kind of interaction*?

See for example researches made by Reid (1991); Wegerif (1998); Harasim (1998) Brenda (2001); Oren (2000) and Birenboum (1999).

Thus the research expands into new directions. One of these directions is the appearance of violence on websites. King (1995) presents us with a research on mood in cyberspace – where *'sad people'* are the source of *'flame wars'* (rude notes in forums*)*. According to his research, flame wars are the *"result of sad, self-focused people using the anonymity of cyberspace for such uninhibited mood outlets*" (King 1995).

In trying to understanding the phenomena of *'flame wars'*, one must account for the inhibition of normal social norms. Being rude, unkind and aggressive in a social situation is highly disapproved of.

"*The lack of the normal social clues, such as tone of voice and facial expressions, that moderate and guide much of social interaction, and would form the bases of social judgment, are completely lacking in cyberspace*" (King 1995).

Rude and offensive language can also be found on ORT school websites. Can this language be perceived as more offensive than when said out loud in the classroom? Or does the fact that we see it in black and white generate a stronger reaction? What is the relation between strong language and the cultural character of Israel? In his research, Hofstede relates to the spoken language when he defines the cultural dimensions and the manner in which parents, teachers and youth talk. He perceives language as not only a symbol, but also as "*vehicles of culture transfer… without knowing the language one misses a lot of the subtleties of a culture and is forced to remain a relative outside*r" (Hofstede 1991, pp. 212-215).

Brenda Danet (2001) studies the phenomenon of the growth of the use of language symbols to create art. Danet (2001) is a sociologist and communication scholar specializing in research on communication and culture on the Internet. *"On the Web individuals interact with images, not with people.* ***Here (in IRC- a chat tool) people interacted with people, via the exchange of images****, while simultaneously logged onto the same IRC channel. The players pursued this activity both for its own sake and as a vehicle for social interaction and the satisfaction of belonging to an emergent virtual community. The images were thus not only "art" but also "communication"* (Danet 2001).

The unique language of symbols analyzed by Danet (2001) is often used on ORT school websites. In my opinion, these reflect a change in culture on a symbolic level, as described by Hofstede (1991).

3.2.4 Cyber Societies

Cyber Societies is a term often used by researchers to describe communities created on the Internet.

In the American movie "*Fields of Dreams*" (1989) an inner voice tells the character played by *Kevin Costner* : "***If you build it, they will come***". Costner complies and builds a baseball field, where deceased baseball players come to play. A common myth regarding the Internet is that if you will build a successful application, the surfers will come. In the case of discussion groups, this myth has turned out to be accurate, and the ability to respond to articles and reports has even become a goal. The sentence: "*on the Internet, everyone can become whatever he or she wants to be*" invites millions of surfers to take advantage of this remarkable characteristic of the Internet: the possibility of hiding behind a shroud of anonymity. Discussion and chat groups enable the exchange of intimate information as well as vicious criticism, without having to deal with the consequences. It may even be said that this anonymity has led to the creation on the Internet of applications such as '*Napster'* which allows surfers to exchange and obtain copyrighted music files, without anyone knowing who provides the files and who acquires them.

Thus, many have been quick to describe what is happening (cyberspace) as the creation of a new society – 'Cyber society'. 'Cyber societies' are described as: "*A new space for human interaction, human socialization, a new area for production of knowledge. This new environment is not geographically restricted, nor is it submitted to the linear pattern of time. The cyberspace integrates different communication technology in a new environment*" (Doherty 1995).

In his article *'**Who will be in cyberspace***?' Winner argues that "*to invent a new technology requires society to invent the kinds of people who will use it, with new practices, relationships and identities supplanting the old… If we limit our attention to their uses and market prospects, we ignore their most consequential feature, the conditions that affect people's sense of identity and community"* (Winner 1995). Winner (1995) raises the main questions through which we can study whether a new community has really surfaced:

1. *Around these instruments, what kinds of bonds, attachments and obligations are in the making?*
2. *To whom or to what are people connected or dependent upon?*
3. *Do ordinary people see themselves as having a crucial role in what is taking shape?*
4. *Do people see themselves as competent to make decisions?*
5. *Do they feel that their voices matter in making decisions that will affect family, workplace, community, and nation?*

Winner (1995) believes that we cannot ignore the contributions of these consequential features on peoples' sense of identity and community.

ORT school websites reveal numerous examples of teachers, students and parents, expressing a sense of identity and community.

Another set of questions is raised by Victor (2002) in his study, the "*potential messages—both overt and hidden… about the nature of knowledge and the role of the schools in its formation and transmission*. In his research proposal Victor (2002) asks the following questions:

- *To what extent are school websites caught up in processes of the transmission of ideology, masking difference, hiding alternative discourse, preparing subjects of the State?*

- *What do schools Web sites possibly teach the children who view them about the nature of learning, the role of education, their position as workers and participants in society?*

In his research Victor analyzes the websites using Johnson's (cited in Victor 2002) "***cultural circuits' model***" of data analysis. In this model, analysis proceeds in four stages:

1. **How was the site produced?** *(name of school, student-produced? Teacher-produced? Faculty-produced? Other?) What are the designers' interests in producing the site? What cultural influences inform the site? (need to publish mission statement, class schedules, etc.)*

2. **What possible meanings are in the site?** *(overt and covert meanings) Examine the site as a literary text. Identify any possible meaning fields. Conduct reconstructive analysis (validity claims, power typology, etc).*

3. **Analyze particular groups exposed to the site** *(students, parents, teachers, community members). What meanings are generated for these representative groups? How are these meanings similar to those found in step 2? How are they different?*

4. **Analyze routine activities of the groups in relation to their interpretations of the site.** *Do they act differently than their interpretations would suggest? Does the site affect their behavior in some way?*

Samuel Ebersole (1995) introduces the philosophical assumptions underlying cyberspace. Following Hunnex (cited in Ebersole 1995), he states that "*The major premises of cyberspace can be illuminated by using the three-fold division of philosophy… **epistemology**, **metaphysics**, and **axiology**.*

Quoting Leibniz's "*Community of minds*," McLuhan's "*Divine Force*" and Ellul (all cited in Ebersole 1995) it is obvious that there is a shared vision where technology will assist the community. "Modern *technology has become a total phenomenon for civilization, the defining force of a new social order in which efficiency is no longer an option but a necessity imposed on all human activity*" (Ebersole 1995).

In the ***axiology*** category, Ebersole (1995) brings to light the issue of '***ethics***' which includes discussions on *abundance, personal privacy, individualism* and *isolation, equality of access,* computer *crime, pornography, job loss, commercialism, materialism,* and *cultural imperialism*. "*While these issues are very specific and tied to specific attributes of the Web environment and specific ways of using the Web, some argue that the larger issue is simply the all-encompassing nature of the technological system, of which this is only one small part*" (Ebersole 1995).

Howard Rheingold (1998) tells the story of 'WELL'- an online telecommunication system launched in spring 1985 in Sausalito, San Francisco Bay, US. Lists of statements made by him show his enthusiasm for this new media and the community it created.

- *Over a period of months, I fell into the habit of spending an hour or two every day gazing in fascination at this window into a community that was creating itself right in front of my eyes.*

- *The vision that McClure and Brand agreed on involved three goals: to facilitate communication among interesting people in the San Francisco Bay area; to provide sophisticated conferencing at a revolutionary low price; and to bring e-mail to the masses.*
- *People who were looking for a grand collective project in cyberspace flocked to the WELL. The inmates took over the asylum, and the asylum profited from it. "What it is up to us" became the motto of the nascent WELL community.*
- *You can't talk about the WELL as a community without meeting Tex, the innkeeper, bartender, bouncer, matchmaker, mediator, and community-maker, another communard who emerged from twelve years on the Farm with a reality-tempered commitment to community-building and a deep distaste for anything less than democratic governance* (Rheingold 1998).

At the same time, Rheingold (1998) shares with us what he calls 'conflict in the WELL environment':

"*Whatever community is, it is not necessarily a conflict-free environment. There has always been a lot of conflict in the WELL, breaking out into regular flame fests of interpersonal attacks from time to time. Factionalism. Gossip. Envy. Jealousy. Feuds. Brawls. Hard feelings that carry over from one discussion to another. When one of those online brouhahas happened and people started choosing sides and unkind words were being said, Tex and I often walked in the hills above Sausalito and talked about how and why on- life can become unpleasant and how to make it work. We kept concluding that simple, corny, all-powerful love was the only way to make a community work when it is diverse, thus guaranteeing friction, and at the same time committed to free expression, which can and does get out of hand*" (Rheingold 1998).

A well known phenomenon surrounding web-based instruction (WBI) is the problem of 'dropping out', abandoning, or not participating in the E-learning course, forums and school website. In trying to answer the question *'Online Learning Communities: If You Build Them, Will They stay?'* Hill (2000) seeks to explain this phenomenon, which she sees as a challenge rather than a problem.

"One explanation for high dropout rates and dissatisfaction with distance delivered courses may relate to a lack of community in non face-to-face courses. In discussing the importance of interactivity, DeVries & Wheeler (1996) discuss the lack of face-to-face contact as a major barrier for distance education. Martin (1999) also mentions the lack of face-to-face contact as a negative aspect to distance delivered courses" (Hill 2000).

As developers, Hill (2000) and others like Palloff and Partt (2002) state that community building can occur in distance delivered courses. They offer us on one hand research that supports evidence of the existence of a community, and on the other hand, provide suggestions and recommendations on how to build virtual communities.

Maboudian (cited in Victor 2002) investigates the part school websites play in defining gender identity. He examines the use of a relatively new cultural form - the Internet webpage - as an instrument of propaganda by a large urban public school district. And by doing so he shows the unique way in which cultural production may be used in powerful ways in the construction of individual and group identity.

Victor (2002) uses Maboudian's (1999) research on school websites to identify ideological features and determine the extent to which school websites perform the function of social reproduction or transformation.

The ***HSFR*** (the Swedish Council for Research in the Humanities and Social Sciences) financed several cyber cultural researches between 1998 and 2000. In four different projects, the researchers tried to see how meaning and identity is shaped through interactive communication on the net. "*The project emphasizes the interplay of symbolic forms, since the Internet as well as various multimedia combines written and spoken words with images and music*" (Fornäs 1998).

What clearly emerges from the literature review, I believe, is a broad background understanding (from different researches) of cultural dimensions as reflected on websites and of the process through which e-learning becomes e-schooling in the educational setting.

In a way, this process represents a "push" and "pull" situation, describing a broader debate concerning the integration of computers in the school environment. Should new technology be "pushed" into schools, or should we wait for demand for technology to rise from the teachers ("pull"). E-learning is considered a "push" technology developed by professionals outside the school environment. E-schooling represents a new direction in a web-based learning environment, while remaining a push technology. On the other hand, cultural dimensions as reflected on school websites can be considered as a "pull" situation, where teachers use the E-schooling platform in a broader way, to teach not only skills and content but also social education in a creative manner. In this process, teachers require new tools to be introduced to the website.

In concluding this part of the Literature Review, I think that the following questions should be asked:

- Can we clearly see the identity of the cultural dimensions described by Hofstede (1991) on school websites? How are the following cultural dimensions - power distance, collectivism vs. individualism, masculinity vs. femininity, and uncertainty avoidance - reflected on school websites in Israel?
- Can the changes that have occurred in Israeli culture over the thirty years since Hofstede's (1991) research be seen through school websites?