

Chapter 5

Conclusions

This research attempts to explore how cultural dimensions are reflected on ORT school websites in Israel. For this purpose, I have chosen to apply Hofstede's (1991) acclaimed work, in which he classifies cultural characteristics prevalent in global organizations into five "cultural dimensions" (power distance, individualism & collectivism, masculinity & femininity, uncertainty avoidance, and time orientation), and Marcus' (2001) interpretation and application of this model to website designs worldwide. Israel was included in Hofstede's classical study, conducted in the 1970's (Chapter 3.1.1).

Marcus (2001) approaches this subject from the perspective of a web designer who needs to adopt a global approach, taking into account cross-cultural aspects when designing a website. A basic assumption held by analysts and designers is that a well-designed user interface which acknowledges demographic diversity, improves the performance and appeal of websites, facilitating the global distribution of products and services throughout internet websites.

The educational system in every country reflects its people's culture. In addition to skills and knowledge, schools place an emphasis on values and culture. With the introduction of computers, and subsequently of new means of communication into schools, an emphasis has been placed on broadening pedagogical methods and contents (E-learning). School websites reflect the school environment as a whole, and

can be seen as windows that allow a glimpse into the different cultures. I have named them "**windows of culture**".

My observations of the ORT school websites focus on three layers of website architecture: user interface, services offered by the websites, and accessibility of information.

This chapter summarizes my findings (Chapter 4) and the relevant literature (Chapter 3).

I have organized this chapter into three sections:

- 5.1. Summary.
- 5.2. Discussion of what can be learned from this research.
- 5.3. Recommendations for further research, policy-making and practice.

5.1. Summary

Organizing the main research question into four sub-questions according to the four cultural dimensions of Hofstede (1991) that are applicable to this research, and putting together my findings and the mentioned literature, I have reached the following conclusions on each question.

How is Power Distance reflected on the design and user interface of ORT school websites; to what extent do expectations and acceptance of unequal power distribution within a culture reflect the seven aspects defined by Marcus (2001) on ORT websites' user interface and design: access to information, hierarchies in mental models, emphasis on social and moral order, focus on expertise, social prominence, important security and social roles.

According to Hofstede's (1991) classic study of cultures in organizations, Israel is a country characterized by low power distance (PD), which he describes as tending to

view subordinates and supervisors as close together and more interchangeable, with flatter hierarchies; where parents and children, and teachers and students, may view themselves more as equals; and where equality is expected and generally desired.

My findings confirm that ORT school websites display characteristics of a country with low power distance. Students are regarded as the sites' main costumers.

Information is directed at them, and the website is their place of self-expression.

Students are encouraged to participate, and I found that they often freely express disagreement and criticism, sometimes even failing to show respect towards their teachers in this open environment.

Still, there are two aspects on ORT school websites – emphasis on social and moral order and social roles – that are more characteristic of a high PD culture . There is no emphasis on social roles used to organize information on ORT school websites.

However, social and moral order, nationalism and religion play a major role and are frequently used and prominently displayed.

How is Collectivism vs. Individualism reflected on the design and user interface of ORT school websites in Israel, which Hofstede (1991) defines as a society characterized by both collectivism and individualism.

Motivation based on personal achievement (maximized for individualist cultures vs. underplayed in collectivist cultures), materialism and consumerism vs. achievement of socio-political agendas as images of success, prominence given youth and action vs. age and experience, underlying sense of social morality: emphasis on truth vs. relationships, emphasis on change: novelty and uniqueness vs. tradition and history, and rhetorical style: controversial, argumentative and tolerant vs. official slogans, are

the parameters used by Marcus (2001) to determine individualism vs. collectivism as reflected on websites.

My findings show that ORT school websites display more characteristics of collectivism, with the exception of the subjects of '*prominence given youth and action vs. age and experience*' and '*willingness to provide personal information*'.

Personal achievement is very seldom recognized on ORT school websites; rather, group achievements are emphasized. Furthermore, images of success are demonstrated through group achievement of social-political agendas. ORT school websites are youth-oriented. Teachers and students may freely express themselves through communication tools available on the websites (bulletin boards, news flashes and forums). On the other hand, the openness, transparency and readiness to provide personal information found on ORT school websites are characteristic of individualism, according to Marcus (2001). These findings support Hofstede's (1991) description of Israel as a society with both collectivist and individualist aspects.

How is Masculinity vs. Femininity reflected on the design and user interface of ORT school websites in Israel, which Hofstede (1991) defines as a society characterized by both masculinity and femininity.

In defining masculinity and femininity in cultures, Hofstede (1991) focuses on gender roles, and the balance between roles and relationships.

User interface, services offered by the websites, and accessibility of information reflect characteristics of masculinity or femininity. Marcus (2001) uses aspects such

as work tasks, navigation, graphics and animation, mutual cooperation, exchange and support to determine the dominating gender on the website.

According to my findings, ORT school websites are characterized by both masculine and feminine elements, with an emphasis placed on feminine elements, such as mutual cooperation, exchange, support, emphasis on aesthetics, and blurring of gender roles.

How is Uncertainty Avoidance reflected on the design and user interface of ORT school websites in Israel, which Hofstede (1991) defines as a society characterized by strong uncertainty avoidance.

Cultures differ in their avoidance of uncertainty, developing different rituals and values with regard to formality, punctuality, legal, religious and social obligations, and tolerance for ambiguity.

ORT school websites are characterized by both low uncertainty avoidance (LUA) and high uncertainty avoidance (HUA) with regards to the first 3 aspects introduced by Marcus (2001). For instance, while clear metaphors, limited choices, and restricted amounts of data can be found, complexity with maximal content and choices is also present on the websites. In the mental models and redundant cues aspects, ORT school websites reflect HUA.

This contradiction highlights the ambiguity existing in Marcus' definition of aspects of uncertainty avoidance. Marcus (2001) has attempted to determine different aspects of user interface design that reflect uncertainty avoidance on websites (navigation, colour coding, complexity level, etc). However, these aspects are not effective in determining the reflections of uncertainty avoidance on ORT school websites.

Therefore, and contrary to Marcus' views, I believe that although Israeli culture is characterized by HUA according to Hofstede (1991), ORT school websites reflect LUA.

Overall the four research sub-questions and tables 1, 3, 5, 7 in the findings chapter introduce an intricate answer to the research question. Although ORT school websites display cultural characteristics of Israel, these are not always clear and straightforward. The websites can be compared to shop windows that offer glimpses into the main cities of Israel. Can clear characteristics of Israeli culture be seen in these shop windows? In my opinion, obvious cultural elements such as symbols, language, the flag, local folklore, and so on, can be found. But at the same time, elements representative of the "globalization culture", such as '*Coca Cola*', '*McDonalds*', '*Levi's*', '*Microsoft*', the use of the English language, and so on, are prevalent.

ORT school websites present a similar pattern. An analysis of the websites using Marcus' (2001) elements of design based on Hofstede's (1991) work on cultural differences highlights the elements of culture that are expressed through the use of logos, colours, activities and cultural contents. Still, ORT school websites do not clearly reflect Hofstede's (1991) cultural dimensions.

In conclusion, tables 1, 3, 5, 7 in the findings chapter echo Hofstede's findings on the reflection of power distance on ORT school websites. However, my findings on Hofstede's three other dimensions – collectivism vs. individualism, masculinity vs. femininity, and uncertainty avoidance – illustrate a more complex picture, with the elements reflected in differing patterns.

Some of Marcus' (2001) elements, which are based on Hofstede's (1991) work, could be found, while the others are much less obvious.

5.2. Discussion

What lessons can be learned from this research? In this section I focus on three issues. I discuss to what extent the results have been affected by the methodology. I compare the results of this particular research with other research on the same subject. Finally, I highlight this research's contributions.

Marcus (2001) interprets Hofstede's research and uses a set of elements to analyze worldwide websites.

Hofstede (1991) concludes from his research that international organizations such as IBM are run according to the local culture and social environment of the country - which he calls '*software of the mind*' - its agencies are located in, although they all form part of the same organization. Hofstede (1991) classifies these cultural characteristics into five dimensions: power distance, individualism & collectivism, masculinity & femininity, uncertainty avoidance, and time orientation.

Marcus (2001) maintains that Internet websites accessible to all are also characterized by local cultural traits.

Marcus (2001) defines in his work a long list of design elements on websites that reflect in his opinion dimensions of culture as introduced by Hofstede (1991).

Although we may differ with, change or even add an element as an expression of Hofstede's dimensions, the range of elements presented by Marcus (2001) provides guidance on how to analyze different websites, including the ORT school websites.

Are the findings of this research a result of the methodology – the application of Marcus' (2001) aspects of design to ORT school websites?

Are the results affected by the standardization and homogeneity which increasingly impacts the principles of website design, such as the use of upper bar, folders, tools (search engines, surveys, image galleries, etc), common icons (home page, mail), etc?

In contrast to the commercial websites aimed at the global market, school websites address the local public, such as teachers, students, parents, the close community and extended community. Furthermore, since the role of schools is perceived as imparting and preserving culture, one can assume that school websites will reflect elements of culture in their contents and design.

However, as mentioned previously, the approach adopted in this research does have some limitations. Websites, and ORT school websites in particular, are dynamic by nature, as it is a fluid medium. This makes it difficult to generalize the findings.

Subjectivity in anthropological reports is unavoidable. As Marcus' (2001) aspects are vague and not clearly defined, they may be interpreted in different ways.

Therefore, a sustained and in-depth analysis of the contents would be more effective in reflecting elements of culture. Furthermore, a comparative research should be made on websites of schools in other countries. These would provide the data necessary to give strength to findings on culture markers on websites, and school websites in particular.

In my opinion, ORT school websites reflect both elements of culture as defined by Marcus (2001) and elements of standardization of website design.

In recent years, there has been an upsurge in the software available globally to create and design websites, all using the same basic tools and elements of design.

Schools' attempts to impart culture as part of their social education policies is reflected in the contents and design of their websites.

I have compared the results of this particular research with other research in the same field, which brings to light certain issues that are discussed in the literature review.

The two main subjects highlighted in the literature review (Chapter 3) - culture and the role of schools in teaching and preserving culture, as reflected on school websites; and school websites - from E-learning to E-schooling – present school websites as '**windows of culture**' – which reflect current Israeli culture, and at the same time, introduce a new direction in the use of computers in schools, from web-based learning methods *E-learning*, to *E-schooling*, which provides an additional environment that educates and imparts culture to the collectivity.

The subjects of cultural differences and cross culture arise in the research on usability of websites on the internet. In order to significantly expand the user base, the globalization of the software system, web page or electronic document must be addressed. It is generally assumed that businesses on the global market need to develop effective websites in order to further their economic interests. There is an increasing number of researches and studies, such as Gould & Zakaria (2001), Gould, Zakaria & Yusef (2000) and Barber & Badre (2004), on the subject of cultural aspects as reflected on websites; Evers and Day (1997), on interface design, and Nielsen (1990) and Del Galdo and Nielsen (1996), on internationalization and localization.

A common thread in all these studies is the attempt to present cultural elements that are reflected on the websites. Barber & Badre (2004) use the term '*culture markers*' that are specific to a given culture: "*Cultural markers are those elements that are most prevalent, and possibly preferred within a particular cultural group*" (Barber & Badre, 2004).

These studies rely on earlier theories and researches in the field of anthropology and sociology on the existence of cultural differences and have created a terminology which can be used to define these differences. Edward T. Hall (1963, 1976), Geert Hofstede (1991), Kroeber and Kluckhohn's (1952) and Fons Trompenaars (1993) are theorists who have developed ideas from their research on cross-cultural communication that can be applied to instructional design. The basic assumption is that there are cultural differences that are reflected on websites. Therefore, we need to take those into account when designing websites in an international setting.

All these studies have addressed the business community wishing to expand globally. However, school websites reflect the culture deemed desirable by the country. The uniqueness of those interactive school websites is that not only they are informative, they also present the existing culture. School websites serve first and foremost the school community: the student body, the teachers and parents. While commercial websites are aimed "outward", directed at the global public, school websites are aimed "inward", directed at the local public. Furthermore, although cultural markers can be found on school websites as well as commercial websites, their significance is different in each case.

The questions raised by school teachers and staff are different from those raised by commercial web designers.

For instance, questions that may be of interest to the school staff are:

- How do websites influence and help interpret behaviour?
- What is the role of culture on websites?
- What influence do websites have on the users (students, teachers and parents), in preserving culture as well as creating 'new culture'?

School websites are also useful in providing 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.

This brings forward interesting questions: How is culture expressed on school websites? What is the educational philosophy behind the term 'culture' as it is used on school websites? Do the '*culture markers*' found on school websites reflect cultural education in a social sense, which perceives cultural education as a process through which the students' personality is shaped, and through which students acquire characteristics, develop skills, shape their opinions, and gain knowledge, all of which allows them to become productive members of the society in which they live?

In defining '*culture*', the anthropological approach refers to the behavioural patterns that are acquired and conveyed through symbols and ideals which have developed over time. An additional meaning attributed to the term culture is betterment (from the Latin word '*Cultus*'). Culture in this sense is a state in which an individual or a

society has attained or is at least striving to attain perfection of the human nature.

While according to the sociological approach, teaching is a technique through which the youth is trained to participate in the society by practicing social roles, the anthropological approach perceives teaching as a technique through which students are taught the values and principles required by the culture. What cultural significance does this approach attribute to teaching?

According to the anthropological approach, teaching aims to pass on to the students the qualities and skills valued as absolute truths. This approach perceives the role of schools as imparting intellectual, moral, esthetic, and other values to the students, and helping them to internalize them. The role of teaching is to bring together the students and the knowledge which comprises these values (Dewey 1916; Lamm 2002). In my opinion, ORT school websites consists of a blend of both approaches.

With the introduction of the Internet to schools over the past 6 years, teachers, experts in different subjects and IT specialists have sought to apply the Internet to the study of subject matters (E-learning), giving rise to high expectations in the field. It was widely believed that the adoption of new and emerging technologies by schools and classrooms would allow teachers to help their students comprehend difficult-to-understand concepts and encourage learning, providing their students with access to information and resources, and allowing teachers to better meet their students' individual needs. Technology would enhance learning and improve student achievement for all (U.S. Department of Education, 2001).

Furthermore, a widespread idea was that E-learning would go beyond time and space limitations.

Although the **E-learning** contents acquired by schools were not properly integrated in school curriculums, they contributed, in my opinion, to an essential part of the experience gained by teachers in the use of the internet in teaching and learning. In my opinion, more time should be allowed to value the opportunities offered by E-learning, such as access to information on school ideals, which can be a very useful complement to teaching (Rosenberg 2001).

With the development of tools providing teachers with the ability to introduce pedagogical contents according to their own needs, a new concept in the use of the internet in the school environment has emerged - *E-schooling*.

The ORT Research and Development Center describes this process as the "*intensive activities based on the use of the Internet as an expansion of the pedagogical-organizational infrastructure of the school (E-schooling)*". According to this approach, *the Internet takes the form of the school Intranet*" (Amit & Kaplan 2003).

While E-learning focuses on the subject matters, ORT instructional designers claim that E-schooling focuses on the interactions between teachers and students around the subject matters. I would also emphasize the importance of the social interactions between teachers and students, and the social climate prevalent in the school.

Therefore, in this context, cultural education is an important issue which must be addressed when building and designing school websites.

What is this research's contribution to the 'scientific body of knowledge' ? What can be learned from its methodology and content?

Three years have passed since the introduction of the '*Clickit*' software to create ORT school websites. By all means, this time span is too short to evaluate the influence this media has on school culture.

ORT instructional designers who monitor the different applications used by schools have disclosed the popularity of some of the tools in contrast to the lack of interest towards other tools. The statistical data collected may be useful in pointing to the more productive approaches to the use of the internet, and even in identifying potential obstacles.

In the introduction to his book, "*Contradictory Logics in Teaching*," Lamm (2002) quotes G. Studard: "*We do not learn to do through thought, nor through action, we learn to do through **thought** on what we are doing.*"

In a way, this research provides reflections on the use of school websites in cultural education. E-schooling – ORT school websites – has prompted a pedagogical dialogue among the staff members within schools, as well as between the school (teachers and students) and the community, the ORT development center, and other educational bodies. This pedagogical dialogue takes different forms and shapes. Some schools place an emphasis on the school's image as it is presented on the website, while others stress the importance of the organization and presentation of the information (knowledge management). Some schools give prominence to the essence of E-learning as is developed by the teachers, while others highlight the special relationship that is formed through this medium between teachers and students. This research highlights and provides insight into some of these pedagogical dialogues. In this context, the importance of this research lies in its contribution to the pedagogical dialogue on culture, and as it is reflected on school websites. For instance, a

comparison of current cultural dimensions on ORT school websites with Hofstede's findings could reveal cultural changes that have occurred in Israeli society.

School websites call for a renewed look at educational, pedagogical and social interactions which occur within the school organization.

5.3. Recommendations

There are a number of recommendations for policy and practice and further research that may be generated from this research.

The review of cultural dimensions presented in this work raises many issues not only on user interface design on the internet, but also on pedagogical questions relevant to school websites.

In this research I have explored elements of design on Ort school websites which reflect culture, based on Hofstede's (1991) well known study on cultures and organizations, and Marcus' (2001) work on user interface and cross-culture.

Following are questions that could form the basis for further studies on the subject of culture on school websites.

- Is what is considered accepted cultural norms in the school environment equally applicable to the internet?
- Are accepted cultural attributes of the real world reflected on school websites?
- What role does culture play on interactions on school websites?

- What role should the community's cultural values play in individualist vs collectivist cultures?
- How much conflict is acceptable in the contents or style of argumentation on school websites, which project the schools' image to the outside community?
- What weight should be given to personal opinion as opposed to group opinion in a society such as Israel where culture has aspects of both collectivism and individualism?
- What should be the focus of school websites: skills, culture and tradition, group interaction, expertise, individual achievement?

Further comparative studies should be conducted on school websites and their development. I share Nachmias' (2001) opinion that the importance attributed to culture on school websites is determined by a well-established pedagogical approach.

All these issues should be addressed by teachers and policy makers in discussions on E-schooling.