

Mirroring Does Not Equal Transparency: The Importance Of Culturally Aware Student Interfaces.

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Abstract

The University of Wollongong, along with most other Australian universities, now has considerable investment in delivering courses to Asian markets. While there is some concern regarding the relevance of a Western-based subject delivery to an Asian culture, most transnational teachers do localize course materials to varying degrees. However, the web-based interfaces to the subject materials are rarely, if ever, similarly adapted to better suit the culture of the intended target audience.

In this paper we argue that failure to take into consideration student perceptions of the interface provided to the materials may adversely affect the usability of such systems. Any advantages gained by localizing course content may thus be totally negated. We contend that providing a culturally aware student-computer interface is equally as important as ensuring local relevance of content.

Keywords: distance education, culture, Hofstede, educational web design; human computer interface

INTRODUCTION

Online organisations has long recognised that adapting their presentation for the respective culture leads to greater business success. Likewise, the many western universities seeking to expand markets in Asia take great pains to develop culturally aware adaptations to course materials. The University of Wollongong (UOW), and many other Australian universities now offer degrees in Malaysia, Singapore and Hong Kong. Locally relevant material and examples are included wherever possible, and there have been some attempts to consider cultural implications when designing assessment tasks (Fuller et al, 2004).

Most offshore courses are supported online to a greater or lesser degree. However, there is little evidence that consideration is given to cultural adaptation of the online presentation of course materials. This is a serious omission. The differences between our Australian culture and that of any Asian country are vast, and this is echoed in the differences in student approaches to learning. The extensive work done localising course content is to be applauded, however we must take care that this effort is not undone by our failure to correspondingly localise the student interfaces to those materials and other online aspects of a course.

In this paper we discuss what is meant by “culture”, and describe some ramifications for design and presentation of on-line courses. We conclude that the common practice of mirroring an Australian focussed student computer interfaces, without any consideration of cultural relevance, is doing our students a great disservice

WHAT IS CULTURE?

There have been several theories that consider cultural impact and business issues. One of the earliest was Hofstede’s 5 *Dimensional Model*. Originally developed in the 1960s, this model focuses on identifying those inherent cultural differences that could affect not only business success but indeed every aspect of life. Hofstede suggests a structure that can be utilized for mutual understanding, thus overcoming the differences in approach to thinking amongst cultures.

Culture is seen by Hofstede as mental programming (Hofstede,1980) brought about by immersion in the social environment in which an individual is reared. For example, to enjoy a game of cricket or baseball can be identified as a question of whether you were born in the United States or in England or Australia. The definition of culture in Hofstede’s research extends beyond the narrow sense of the art or literature of a nation; it involves the ordinary aspects of everyday life. It includes meeting people, what we eat, how we show feelings, body space and even personal hygiene. Hofstede’s definition also encompasses where a person’s feelings can be hurt if another doesn’t understand the implications of misinterpreting a particular behaviour in a given situation.

An individual in a culture belongs to many different groups. Age, location and occupation are some factors that may determine the various groups an individual may belong to within a culture. The primary group for consideration in this paper is at the national level. The concept of 'nation' is a relatively recent development and has only been in existence worldwide since the twentieth century following the colonial period in history. Each nation embodies certain dimensions, which form part of the nation but are also areas of potential discord with other nations and their cultures. These dimensions can be measured in relation to other cultures. Hofstede defines five overall dimensions: power distance, collectivism versus individualism, femininity versus masculinity, uncertainty avoidance and long term orientation. (Hofstede, 1980).

Although other cultural theories have been proposed, Hofstede's remains the most cited in business literature (Chanani & Theivanathampillai, 2002). In the remainder of this paper we consider the implications of Hofstede's findings in relation to the design of educational websites.

IMPLICATIONS OF CULTURE

Hofstede devised a questionnaire aimed at measuring these dimensions, and in a series of studies compared responses from local IBM employees in various countries. In this paper we compare Singapore, Malaysia, Hong Kong and Australia. We discuss the significance of scores for power distance, collectivism uncertainty avoidance and long term orientation in particular, as these are the areas of greatest variation and thus have the greatest implications for design of interfaces.

Power Distance

Power distance refers to the inequality that can be found within a culture and within an organisation. It is the measure of the interpersonal power or influence between one person and another as perceived by the least powerful of the two (Hofstede, 1980). The scale used is out of one hundred (100) with a mean of 51. Singapore scored 74, Hong Kong 68, Malaysia had the highest score of 104¹ while Australia's score on this scale is a relatively low 38 (Hofstede, 1991).

Australia's score on the PDI index indicates a limited dependence by workers on their employers and shows a preference for consultation, or interdependence. The high PDI countries such as Malaysia, Singapore and Hong Kong indicate dependence in their relationship to their employer. These employees would be unlikely to approach their boss, let alone contact him or her.

Scores on the PDI index also measure the power distance between teachers and their students. The higher the PDI score, the more dependent the student is on the teacher as the source of all knowledge. The teacher is kept "on a pedestal" and is never contradicted in public. Rote learning is more common, regardless of the level of education. If a student misbehaves, parents are called in to participate in the disciplinary action. The low PDI country has the reverse situation. Students and teachers are treated as equals. The educational process is student centred and students are expected to find their own intellectual path and are encouraged to ask questions if they don't understand a concept. Arguing with a teacher is common and no particular respect is shown to them, other than that earned through an individual teacher's interactions with the students. The educational institution is responsible for discipline and it's only in extreme cases that parents are called in (Hofstede, 1991).

The difference in PDI scores between the Asian countries and Australia is one that must be taken into account when delivering a degree program or subject in their cultures. Australian academics tend to approach the delivery of their subject offshore the same as they do onshore, although the cultures in which they teaching is quite different. The students view the academic as the "all seeing", "all knowing" expert, and expect that all the information they require can be found from the website supporting the subject. In their experience the site should be "serving as a font of knowledge". To design the site in a manner different from this cultural expectation could cause some confusion at best and at worst render student success unlikely. In addition, the Australian academic would potentially be judging the Asian students by their own expectations of student conduct or behaviour within the context of the subject, thus affecting the student's results overall.

Collectivism versus individualism

The collectivism versus individualism cultural dimension refers to the relationship of the individual to the society in which he or she lives (H1, 148, 80). In some societies individualism is seen as an honourable trait, in others it is alienating and should be avoided. In nature, animals such as wolves work together in a collective, where others such as bears are more solitary. For an individual, how he or she live together with others in society, together with the norms of that society is reflected in their mental programming as well as societal institutions such as family, education and government (Hofstede, 1980).

Hofstede's individualism [IDV] scale measures results out of 100, where the lower the score, the less individualistic the country's people perceive themselves to be. Singapore scored 20, Hong Kong, 25 and Malaysia 26 on this scale, whereas Australia ranked second only to the United States with a score of 90 (Hofstede, 1980). The individualistic countries value having personal time, freedom in the job and having challenging work to do. The number of "wealthy" countries who achieved a high score on this scale reflects these values. Less wealthy countries don't have the opportunity to target these values; instead they have found that training, good physical working conditions and freely using their skills on the job is more desirable.

¹ The over 100 score was achieved due to some employees answering twice on some questions in the questionnaire.

The more collectivist societies desire harmony within their social environment, and being loyal to the group in which they are identified. A major concept in the collective society is that of “face” or the sense of being humiliated. An individual loses honour or prestige if he or she fails to meet the expectations required of his or her social position (Hofstede, 1991). The sense of the collective is reflected in attitudes in the classroom. The student in a collective society does not speak up in class, even if a question is directed to the individual or the group. The collective society is educating students to become an acceptable group member, i.e. students learn how to be a productive member of society (Hofstede, 1991). Conversely, the individualistic student is striving for a place in a society of other individuals. The goal here is to accept a positive attitude towards what is new and to “learn how to learn” (Hofstede, 1991).

These two opposing approaches to learning must be echoed in both instructional design and the design of educational websites. A student who is expecting to be a “good” member of class and be one of the group, would find it confronting to be singled out as an individual and expected to contribute publicly to a discussion board or forum. Unless such activities are introduced in a culturally aware manner, those subjects including such tasks could easily jeopardise the educational success of the student.

Femininity vs Masculinity

Hofstede’s study considered two factors when measuring the masculinity/femininity aspect of culture. General tendencies for the MAS scale are that the masculine country has ambitious and competitive men and women, however the women could be ambitious for their male family members or partners. The feminine country has both men and women learning to be non-ambitious and modest. Assertive behaviour is admired in the masculine country and ridiculed in the feminine one. Australia scored 61, Hong Kong scored 57, Malaysia scored 50 and Singapore scored 48 out of 100 on this scale (Hofstede, 1980). The scores indicate little difference between Australia and Hong Kong with a slightly larger variation between Malaysia and Singapore. These differences are not as pronounced as in other areas of the Hofstede study. While they do have some pedagogical implications, we do not believe these extend to website design, thus this scale will not be discussed further.

Uncertainty Avoidance

Uncertainty avoidance refers to how people cope with uncertainty about the future. In effect, the Uncertainty Avoidance Index (UAI) is a measure of the extent to which the members of a culture feel threatened by uncertain or unknown situations (Hofstede, 1991). This feeling can be seen in stress and a need for rules. Again, Hofstede used a scale out of 100 where 0 is for the country with the weakest uncertainty avoidance and 100 for the strongest. Australia scored 51 on that scale with Malaysia at 36, Hong Kong at 29 and Singapore scored a lowly 8.

The result of these scores indicate that while Australia is in the middle of the scale where rules are needed for 50% of the time, Singapore has the lowest UAI result with an 8, indicating the greatest need for rules and governance in their society. This difference can easily cause a conflict in the classroom situation where students from a strong UAI country expect teachers to be experts and use language that is difficult to understand. If the academic is from a low UAI country, he or she will be more comfortable with classroom debate. High UAI classroom situations will have few rules and those rules would exist only for extreme situations again establishing a situation that is a source of conflict (Hofstede, 1991).

Similar stress can be experienced if a student from a low UAI country is interacting with an unstructured website. Such students expect information to appear in an orderly way. They are more likely to feel uncomfortable with sites intended to encourage exploration, and may fail at research based activities, unless the activity is fully specified.

Long Term Orientation

Hofstede’s original theory included only the four dimensions already discussed. In subsequent work with Bond, a fifth dimension, Long Term Orientation (LTO), has been added. This dimension is linked to the beliefs of Confucius, and is sometimes known as Confucian Dynamism. It is characterised by persistence, ordering relationships by status and observing that order, thrift, and having a sense of shame. An individual is encouraged to foster virtues oriented towards future rewards, particularly perseverance and thrift (Hofstede and Bond, 1988). Short term orientation is characterised by personal steadiness and stability, protecting your “face”, respect for tradition and reciprocation of greetings, favours, and gifts (Dahl, 2003). A short term orientation culture fosters virtues related to the past and present, fulfilling social obligations and respect for tradition (Hofstede and Bond, 1988). Western cultures are characterised by short term orientation, whereas Asian cultures are generally characterised by the long term orientation.

Australia scored a relatively low 31, on the LTO scale, Singapore 48 and Hong Kong an extremely high 96. (Malaysia has not yet been measured on this scale.) The results are highly significant. Results for the other four dimensions may have suggested that “asianising” a subject or interface is sufficient. While the long term orientation of the Australian culture is clearly different from Singapore’s, the gulf between Hong Kong and Singapore, both Asian nations, is even greater. Thus a subject adapted for Singapore may not be suitable or relevant to Hong Kong. There can be no short cuts. We must work toward adapting subjects for each of the different countries, not simply classifying them all as “Asian”.

The student who is enrolled in a subject designed for a Western culture is faced with an unfamiliar perspective. An Asian student's perspective is focused on achievement and long term gain. The Western perspective refers to what has passed and builds on that history. Concepts that are developed in a course that has been developed in Australia are based on an entirely different approach to that of the student's entire experience. Unless some means of developing the concept that learning from the past will lead to success in the future is built into a Western subject, an Asian student would be at a disadvantage. Without the sense of achievement through effort, the offshore student would not be able to ascertain the relevance of the particular exercise or content of the subject and not achieve in the subject.

FUTURE WORK

We continue to research cultural differences between Australia and UOW's current main overseas markets to identify implications for all aspects of teaching our courses locally. Work is ongoing to develop a set of principles or guidelines that can be used as a framework to facilitate the design of culturally aware courses. The framework is intended to consider cultural implications for an entire course or subject, covering a variety of issues from localising content, presentation, assessment, choice of text and student interface to supporting websites and/or class management tools. It is hoped that the Asian student, once in a subject's website, that is suited to his other cultural background will be more comfortable and perform to a higher standard than if he or she was required to adapt to the Western model. As well, the method of presentation of course content, by the Australian academic is being determined to develop a model to better ensure that the content of the subject is a 'best fit' for the Asian offshore student. By determining those factors it is hoped that the offshore student will have a far more pleasant and successful experience in achieving their Western degree.

CONCLUSION

Anyone can react to given situation in a variety of ways, and the manner in which a person responds is determined by his or her culture. This reaction is in every aspect of life, including education. This paper presented preliminary arguments supporting the notion that design of educational websites must be tailored to the culture of the intended student population. It is not sufficient to tailor course content alone. Failure to also consider the ways in which students will interact with online content and/or interact online with instructors or each other may adversely affect student success.

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