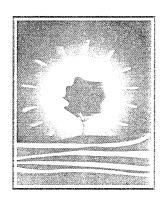# 6th NATIONAL RURAL HEALTH CONFERENCE

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Rural health and information technology: a critical discourse analysis perspective

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INTRODUCTION

Recently we saw the following piece of information on the Internet which cited a research report in the New England Journal of Medicine about how to improve longevity[1]. Dr Karen Weatherby's study was conducted in three hospitals in Frankfurt with 200 male outpatients. Half of the patients were instructed to look at busty females daily and the other half told to refrain from doing so. The study revealed that after five years, the chest watchers had lower blood pressure, slower resting pulse rates and fewer instances of coronary artery disease. According to Dr Weatherby's medical research report in this prestigious medical journal, engaging in this activity a few minutes daily cut the risk of stroke and heart attack in half. The conclusion was: ogling breasts makes men live longer.

There was no such a medical research study. Dr Weatherby did not exist. None of us would take such a report seriously and some of us would trash it as a dirty joke. Similarly, we do not take seriously this kind of misinformation as in seen in some advertisements on how to lose weight, how to combat hair loss, and how magical certain medical programs or policies are. The issue is that the Internet is no longer confined to a small group of computer experts. It has become an information superhighway with all its appeal and "magic power". It can be used and abused like any other product of our modern civilisation. However, the impact of the Internet, in particular, and information technology, in general, could be very far-reaching if it is allowed to travel wildly like a wild animal through various cultural territories. For some it is a product and a tool of globalisation. For others, it is also a distinctive feature of new paradigm.

INFORMATION TECHNOLOGY AND RURAL HEALTH

One of the best ways to see an impact of something on society is through some interesting changes in language. Fifty year ago, it was not possible to find the following words in a dictionary (or perhaps they existed but with different meanings): Web, Internet, email, cyber, virtual, etc. Words, prefixes and Internet-classifiers have been introduced to mark the strong emergence of a new era of computer technology such as e-commerce, email, cyber-chat, on-line banking, virtual class etc. Nowadays, we can do banking at home, receive emails every minute, and do virtual shopping in "stores" thousand miles away. Doctors work collaboratively in an operating theatre while they are physically in different parts of the world. In other words, the world is somehow at our fingertips.

The Internet has become a powerful phenomenon. It has permeated many aspects of the modern world, particularly in business, health and education. The Web has created its own culture with its own language and its own people creating their own discourse community. In the educational context, the Web has provided a new platform, which stimulates a new spirit and practice of doing and learning. The hypertext aspect of multimedia provides the underlying informational motive force that stands to revolutionise the presentation of information. Hyperlinks, automatic searches, and the ability to connect pieces of information in a network or web of knowledge offer new capabilities to information developers using multimedia.

Before discussing the role of the Internet in rural health, it is important to look at the rural discourse. Traditionally, in the minds of many city dwellers, in Australia or overseas, the metaphor of a rural land tends to designate images of cattle roaming on endless fields, a place for city people to hide away from urban civilisation, and a vast land with few people whose main interest is primary production. These stereotyped images distort the real picture and the real story of rural Australia in the current context, particularly when information technology has entered the rural discourse and created an impact. Like many other words, the term "rural" can be interpreted in different ways depending on our personal experiences and professional perspectives. In Vietnamese, the root word "rural" (quê) could trigger beautiful and peaceful images of a harmonious traditional life as seen in words such as "quê huong" (country), "quê nhà" (home land), "chiêù quê" (peaceful afternoon in the countryside). However, it could be used in a discriminatory sense against people living in a rural area such as "quê" (old-fashioned, naive, uncivilised), and "đô` nông dân" (uncivilised ignorant peasants). It is seen as an expression of discriminatory dysphemism. Similarly, the term "remote" has been introduced recently to give a different image of remote areas of Australia, usually discriminatory.

The recent recognition and re-emergence of the rural community as an important aspect of Australia and as a significant force of the Australian politics has led to innovative developments in the rural community. For instance, in the health context, we see the emergence of relatively new organisations such as the National Rural Health Alliance (NRHA), Association for Australian Rural Nurses (AARN), Australian College of Rural and Remote Medicine (ACRRM), and Services for Australian Rural and Remote Health (SARRAH) etc. In 1999, the Australian Journal of Rural Health (AJRH) became the official journal of the National Rural Health Alliance. Since 1996, University Departments of Rural Health (UDRH) have been established to contribute to an increase in the rural and remote health workforce through education and training programs, as well as a reduction in the health differentials between rural and urban people and between Indigenous and non-Indigenous peoples.

CRITICAL DISCOURSE ANALYSIS AND THE INTERNET

AusWeb97, which was the Third Australian World Wide Web Conference, had approximately sixty papers on the Web. In the Introduction of its proceedings, the Editors wrote:

AusWeb brings together contributors and attendees from industry, the media, research organisations, government and academia, librarians, scientists, journalists, educators,

accountants, and many others come to AusWeb. They bring a mix of interests and ideas which provide many opportunities for cross-fertilisation of ideas and experiences.[2]

It was an exciting mixture of so many papers presented by a wide rang of people of different professional backgrounds. However, the expression "cross-fertilisation of ideas" was rather general and perhaps ambitious, as all papers tended to sing the same song: long live the Web! Not one paper was critical of the Web and its sociocultural discourse.

This narrow perception of information technology is also seen at the international level. The World Conference on Educational Multimedia, Hypermedia and Telecommunications in Seattle in 1999 was a major world event and it attracted over 600 paper proposals. It was different from the AusWeb conference in Australia, as all participants at this international conference came from 50 countries and worked directly or indirectly in the field of education, particularly tertiary education. One would expect that educators would be more interested in cross-fertilisation of ideas. However, the cross-fertilisation at this conference was only confined to promoting the use of the Web in education. Does this mean that it has been all smooth sailing with the Web in particular and information technology in general among the education community? The Internet is very useful, but not always useful.

The Web has provided users with an extremely powerful tool for sharing information. It also brings along problems in a human context. Clark and Estes[3] questioned the value of computer technology in education in an article entitled "Technology or craft: what are we doing?" Perelman[4] expressed a similar sentiment in his book *School's out: Hyperlearning, the new technology, and the end of education*. Postman[5] demanded redefining the value of school in computer-based education. Like face-to-face teaching, virtual classroom teaching in intercultural education needs to be culturally sensitive as it may create cultural conflicts between course designers, teachers and learners[6]. Factors such as cultural stereotyping, cultural norms in social interaction, learning styles and cultural attitudes to education and health need to be taken into consideration. Otherwise the superhighway can lead to conflicts, particularly when the cultural gap between the Internet-based provider and the receiver is very wide. Zygmunt Bauman, who was named by the Times Higher Education Supplement as the pre-eminent theorist of postmodernity, in his book *Liquid Modernity* (Polity Press)[8] argued that we have moved away from a heavy, solid, "hardware" version to a light, liquid, software-based modernity. Nowadays, capital travels light, with cabin luggage only, which includes no more than a brief case, a cellular telephone and a portable computer. It can stop over anywhere, and no one needs to stay longer than the satisfaction lasts.

"Beware of the wolf!" This is a popular message in fairy tales and fables for young children. It reminds children of any danger that a wolf can cause to them. Though the image of a bad wolf is no longer in our consciousness, there are still many dangers we need to be aware of, particularly with the permeation of computer technology in society. When we live in a real world, which is filled with a fascinating mixture of enthusiasm, desperation, information, misinformation, use, abuse, advertisements and propaganda, our existence cannot be taken for granted. Somehow we are consciously or unconsciously participants in a discourse which cannot be value-free, being a family, university, health organisation or member of a small remote and isolated village. Some people are victims of life because of the discourse in which they are brought up.

Concepts such as revolution, paradigm, enlightenment, and empowerment are often used to describe the changes from one system into another. Paradigm shift refers to a meaningful change from one alternative to another. This can happen if we are taken for granted and we are not critical of various aspects of our discourse. The Internet is seen by many as a powerful tool for teaching and learning. If we allow it to roam around the world without considering it critically, it can turn into a "bad wolf".

Critical Discourse Analysis (CDA) is useful in assessing issues such as this. Continuing a tradition that rejects the possibility of a "value-free" science, CDA argues that science, and especially scholarly discourse, is inherently part of, and influenced by social structure, and produced in social interaction. CDA primarily studies the way abuse of social power, dominance and inequality are enacted, reproduced and resisted by interaction in the social and political context. For some Internet supporters, the Internet has been glorified as a powerful and effective instrument for implementing globalisation. For others it can be seen as an instrument for creating social isolation, widening the gap between the rich and the poor, representing a dominant culture. How can we reconcile these two opposing views? This is an issue that should not be swept under the carpet if we are serious about using the Internet to promote meaningful interaction and development.

Critical theorists are interested in emancipation and empowerment. This has inspired educators to adopt critical theory to take some action, in an educational context which clearly shows a distinction between the privileged and the disadvantaged. In a multicultural context, there is a tendency to focus consciously or unconsciously on the dominating culture which is the driving force of educational achievement. Ideological distortion plays a part in maintaining social imbalance against emancipation. Critical theory seeks to explain the power and persistence of such ideological distortions by showing how systematically distorted ideas and belief systems arise, and the role they play in maintaining a system of social interaction.

How innocent is the Internet, ideologically? Is the Internet value-free from an ideology-loaded discourse? The answer could be "no" or "yes", or a contradictory mixture of both. Many of us would agree that the Internet is only a tool. Like many other tools, it is a physical entity which is subjected to good use or abuse by human beings. Simply put it, the Internet is morally innocent and ideologically neutral. However, the Internet is a product and an instrument which cannot be divorced from its historical background and functioning. It was invented and has been maintained by a professional group or elite for serving their growing needs and reinforcing the images and metaphors of their worldviews. The Internet is there because it helps to maintain a system of social interaction. Various educational institutions have reinforced the interaction among workers and lay people of various social backgrounds on a non-discriminatory basis. The same argument is made for the critical use of the Internet because the Internet is not just a means of communication but it is also a social phenomenon encoded with ideologies.

Discourse analysis has been a popular research focus in education, sociology, and linguistics. Recently, CDA has emerged to argue strongly that a discourse can enhance some people and discriminate against others. CDA is a type of analytical research that primarily studies the way social power abuse, dominance and inequality are enacted, reproduced and resisted by text and talk in the social and political context. With such

dissident research, critical discourse analysts take an explicit position, and thus want to understand, expose and ultimately to resist social inequality. The Internet is no longer "innocent". It has received some attention from research questioning its role in a social discourse.

It is normally accepted that the power of the Internet has increased rapidly. It is very powerful as it can perform huge tasks with its speed. The newly introduced prefix e-such as email, e-commerce, e-trade, e-banking etc. shows clearly the impact the Internet has in modern society. It empowers many institutions to revolutionise their old practices. The Internet and globalisation walk merrily together. However, this is not the way emancipation is perceived from the perspective of critical theory. It is disempowerment as the Internet divides the gap between the e-people and those who cannot afford the Internet or those whose culture does not accept or worship the virtual reality. We all know when a highway runs across a village. Its culture and environment are no longer the same. Metaphorically, this could apply well to the Internet as a superhighway.

CDA raises crucial questions regarding certain hegemonic aspects of modernism and by implication how these have affected the meaning and dynamics of present-day interaction and development. CDA encourages us to question how the master narratives become constructed and how they influence thinking and living experience. In addition the regime of knowledge should be questioned or challenged as it is "there" in the system because it is part of power. Power and knowledge cannot be easily separated. Social structures and processes are organised through institutions and practices such as the law, the political system, the church, the family, the education system and the media, each of which is located in and structured by a particular discursive field. Discursive fields consist of competing ways of giving meaning to the world and of organising social institutions and processes. They offer the individual a range of modes of subjectivity. Within a discursive field, for instance that of law or the family, not all discourses will carry equal weight or power. Some will account for and justify the appropriateness of the status quo. Others will challenge existing practices from within or will contest the very basis of current organisation and the selective interests which it represents.

Health workers do not work in a culturally neutral discourse or a virtual reality. Those who have worked in a face-to-face interaction with people in different social discourses give many insights about the complexity of sociocultural diversity of health issues. Hodes[7] worked with a large number of Ethiopians residing abroad as refugees, immigrants, or students. To provide adequate care, physicians must understand their beliefs about health and medicine. For example, bad news is usually given to families of patients and not the patients themselves. According to Muller[9], considerable attention is now being given to ethical conflicts raised by such issues as the disclosure of diagnosis and prognosis, the role of the family in making medical decisions, and the withholding or withdrawing of treatment to terminally ill patients. For physicians who are struggling with the intricacies of bioethical dilemmas, being sensitive to the cultural beliefs and practices of their patients and yet maintaining their own moral integrity ultimately requires a juggling act that is difficult for even the most thoughtful and compassionate professionals to manage. Klessig[10] pointed out that instances of poor communication can occur if the cultural values of the health care professional and the

patient are different, and each is unaware of the reasons underlying the other's behaviour or viewpoint.

The University Department of Rural Health, Tasmania (UDRH) has been very conscious of the role of information technology since its development. In 3 years it has helped secure a higher profile for Tasmanian rural health through strategic partnerships, education and research activities, leading-edge use of information technology and web-based initiatives, a network of rural health teaching sites, and the media. The Internet has undoubtedly played an important part in our mission to create an interactive and informative discourse for health workers working closely with people of different geographical backgrounds and life styles. With the awareness of the positive and negative impacts of information technology in our rural health mission as a UDRH, we have developed activities to achieve a constructive and collaborative approach to the use of information technology in rural health programs. These include activities to develop strategies of acculturation in an information technology discourse community[11], on-line activities which draw on close working relationships with health workers and clients, and collaborative approaches to teaching and learning[12]. In written documents and on-line courseware, it is important for us to be aware of the extreme sensitivity of issues such as suicide, domestic violence, sex orientation, etc. Extra care is given to the choice of words, clichés, and graphic illustrations, as they can be misinterpreted or offensive to others. The on-line writers cannot operate in a virtual reality and must take into account real people in real contexts.

CONCLUSION

It is impossible to imagine how it would be if we carried out daily tasks without the use of information technology. In the words of McLuhan, we are living in a global village[13]. To a great extent, information technology has helped us to become interactive villagers in a global discourse. However, we should not take diversity for granted, whether it is rural or non-rural and national or international. As Albrow[14] stated: "Globality restores the boundlessness of culture and promotes the endless renew ability and diversification of cultural expression rather than homogenisation or hybridisation." This is also of interest to many of us who would like to use information technology in different social discourses.

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Dr Quynh Lê is the IT&AT Co-ordinator in the University Department of Rural Health (UDRH), University of Tasmania. She originally worked as a mechanical engineer in a factory. Later, she realised that working with engines and machinery equipment was not her cup of tea, particularly her long black hair and a machine environment were like two contrasting seasons. She decided to wander in a virtual land to explore the wonder of software and hardware. With tedious assignments and hard work, she finally made computers an important part of her life narrative and gained her doctoral degree for being faithfully virtual. Somehow, the virtual reality took away many aspects of real life, and she turned to education for alternative answers to the human world and ended with a MEd degree. The UDRH is now her sweet homeland as it provides her with both worlds: virtual reality and actual reality.